

Addis Ababa University
College of Education and Behavioral Studies
Department of Special Needs Education

**Gender-Based Violence and its Association with Mental Health
among Women with and Without Disability
in Addis Ababa**

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Addis Ababa University
College of Education and Behavioral Studies
Department of Special Needs Education

**Gender-Based Violence and its Association with Mental Health
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Enishaw Teshome Mulatu

**This Dissertation is submitted to the Department of Special Needs Education in
Partial fulfillment of the requirements for the degree of Doctor of Philosophy in
Special Needs Education.**

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Declaration

I, Enishaw Teshome, hereby declare that the dissertation entitled *Gender-Based Violence and its Association with Mental health among Women with and without Disability in Addis Ababa* is the output of the original research work that I have carried out towards the partial requirement of the degree of Doctor of Philosophy in Special Needs Education. I further declare that all the materials used to complete this work have been duly acknowledged.

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Certificate

I, Dr. R. Sreevalsa Kumar, hereby certify that the dissertation entitled *Gender-Based Violence and its Association with Mental health among Women with and without Disability in Addis Ababa* is an original work carried out by Enishaw Teshome towards the partial requirement of the degree of Doctor of Philosophy in Special Needs Education under my guidance and supervision. The dissertation has been submitted for final evaluation to the University with my approval.

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ABBREVIATIONS AND ACRONYMS

AACABFED- Addis Ababa City Administration Bureau of Finance and Economic Development

GBV-Gender based violence

MANOVA- Multivariate analysis of variance

PTSD-Post traumatic stress disorder

PCL-C-Post-traumatic stress disorder checklist: civilian scale

PHQ-9- Patient Health Questionnaire-9

RSES- Rosenberg's self-esteem scale

STAI- State-Trait Anxiety Inventory

WWD- Women with disability

WWOD- women without disability

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ABSTRACT

Gender based violence (GBV) is a devastating problem for women in general, but it is more dreadful among women with disabilities (WWD). The extent of GBV and its association with mental health among WWDs and women without disabilities (WWODs) are almost unexplored issues even at global level. Thus, the current study explored the extent of GBV and its association with mental health among WWOD and WWD in Addis Ababa. For this purposes, 303 WWDs and 170 WWODs were selected by using simple random sampling technique. WHO GBV assessment instrument, PHQ-9, PTSD Checklist-Civilian version, STAI and Rosenberg self-esteem scale were the instruments used. Data were analyzed using descriptive statistics and MANOVA followed by univariate ANOVA post-hoc comparison followed by independent samples t-test. The aggregate result of GBV revealed that, 84.1% of WWDs and 76.48% of WWODs experienced at least one element of GBV during their life time. Similarly, 76.56% of WWDs and 60% of WWODs experienced GBV during the last twelve months. In addition, 79.2%, 72.6% and 63.7% of WWDs experienced psychological, sexual and physical violence respectively during their life time. For WWODs, 65.9%, 51%, and 50% experienced psychological, physical and sexual violence respectively during their life time. Regarding GBV and mental health problems and self-esteem, more number of WWDs and WWODs who experienced GBV met the criteria for depression, anxiety, and PTSD and also lower self-esteem than their non-abused counterparts. Result from MANOVA revealed that there was statistically significant difference in depression, state-anxiety, and PTSD among WWD who experienced and did not experience GBV. In addition, there was statistically significant difference between WWD and WWOD who experienced GBV only for self-esteem mean scores but not for depression, state-anxiety, trait-anxiety and PTSD. Finally, there was no statistically significant difference between women living with visual, hearing and physical disability for the five dependent variables. Implications of the findings are explored against prevention, remediation, and rehabilitation of WWD and WWOD who have been physically, sexually and psychologically abused.

Chapter One

Introduction

1.1 Background of the Study

Gender based violence (GBV) against women with and without disabilities is a global phenomenon that is observed in every nation, community, everywhere (on our streets, in our homes, schools, workplaces and institutions) with significant adverse physical, social, psychological and mental health consequences (Gossaye, Deyessa, Berhane, Ellsberg, Emmelin & Ashenafi, 2003; WHO, 2011). According to World Health Organization (WHO), each year, more than one million women with and without disabilities lose their lives due to GBV. Moreover, as a result of GBV, large number of women is injured and suffers from a range of physical, sexual, reproductive and mental health problems (WHO, 2011). This implies that GBV is an epidemic and chronic problem that requires collaborative and cooperative effort from the concerned bodies to alleviate its impact.

GBV is a comprehensive concept that encompasses various aspect of violence. Some of these include sexual violence (rape and marital rape, sexual abuse, sexual exploitation, forced prostitution, sexual harassment and the like), physical violence (physical assault and trafficking), psychological violence (verbal abuse and isolating a person from friends/family) (García-Moreno, Jansen, Ellsberg, Heise & Watts, 2005). Furthermore, GBV encompasses harmful traditional practices (female genital mutilation, early marriage, forced marriage and neglect) and socio-economic violence (discrimination or denial of opportunities, social exclusion, and obstructive legislative practice) (UNHCR, 2003).

The root causes of GBV against women in general are multi-dimensional and there was no single factor that makes clear why some individuals are violent, or why violence is more prevalent in some communities or parts of the community than others. The causes can extend from individual level to more complicated societal level. For instance, witnessing marital violence as a child, being abused during childhood, absence or rejecting father, male dominance in the family, male control of wealth in the family, use of alcohol, unemployment/low socio-economic status, delinquent peer association, rigid gender role, sense of male entitlement/ownership over women are the common causes of violence (Heise, 1998).

Moreover, causes which exposed women for GBV can also be related with women's personal behavior and their attitude towards their male partners. For instance, women can experience sexual violence as a result of their attitude towards tolerance and male supremacy in their relationships, their personality characteristics such as self-esteem and rejection sensitivity, risky behaviors such as frequent substance use (i.e., chewing Khat, shisha and alcohol use) and relationship factors like pressure to have sex from female friends, and insecure attachment (Bekele, Aken & Dubas, 2011). Furthermore, women can be exposed for GBV, as a result of their economic, social, cultural and psychological dependency on their husbands/partners. Such lack of self-sufficient feelings can lead them to tolerate various forms of GBV from their abusers/partners.

A systematic review in Ethiopian context also indicated that violence is significantly associated with husband alcohol consumption, Khat chewing, family history of violence, partner education, decision making power, residence and related victims' personal characteristics

(Agumasie & Bezatu, 2015). In addition, a research conducted in South West Ethiopia reported shortage of money, disobedience, and drinking alcohol as the major contributing factors for GBV (Deribe, Beyene, Tolla, Memiah, Biadgilign, Amberbir & 2012). This confirmed the multi-dimensional causes of GBV that extend from economic factors to abusers' personal behaviors in Ethiopian context.

In some parts of Ethiopia women seem under the control of their husbands in many aspects. For instance, in Ethiopian cultural society women seem under the control of their husbands to decision making in many important life activities such as on economic aspects and determine family size. Most of the time men were considered as the main source of income for the family life and women's contribution at home seem less valued. As a result, the right to play in decision making and the right to own property seem very much limited. Consequently, the husband controls and makes important determination to make him more advantageous and beneficiary than his wife. For example, in some parts of Ethiopia cultural society, the reality revealed that the husband has the right to marry more than one wife. Such biased cultural practices can be one of the causes of conflict that is directly related with GBV (Deribe et al., 2012).

Women with disabilities also experience the same type of abuse from abusers as do women without disabilities. However, their "disabilities" may place them at additional vulnerability and the barriers so that it is difficult to end the abuse and can be much more than for women without disabilities (Curry, Hassoneh-Phillips, & Johnston-Silverberg, 2001). Women

with disabilities experience GBV because of their disability related personal conditions, societal stigma and related attitude towards them. For instance, because of their economic, social and environmental dependency on other individuals including their caregivers, people living with disabilities may face difficulty to escape and defend themselves from perpetrators' attack. The most serious vulnerability to abuse may result from the socio-cultural context of disability, which unfortunately continues to be one in which person with disabilities suffer from pervasive stigma and marginalization (Davis, 1997). Persons with disabilities were often considered by society to be "not completely human and of less value" (International Network of Women with Disabilities, 2010, p.6). Furthermore, some societies may believe that disability is a punishment from God or that the person with the disability may infect others with the disability. Others may see a person with a disability as an object for charity or pity, rather than as a person deserving equal rights.

A study by Brownridge (2006) illustrated that when a woman with disability is raped, people never take it seriously saying that no one can rape her. Consequently, these misconceptions and stereotypic attitudes of the communities can expose women with disabilities for GBV and related problems. This implied that violence against women with disability is double burden as a result of their gender (being female) and their disability status.

Women with disabilities may be reluctant to identify and report abusers because of their dependence on others, especially if the abuser is their care provider. In addition, abused women's perception of powerlessness may be influenced by social isolation, which increases their risk of employment opportunities, education and economic dependence (Curry et al., 2001). The same

study also reported that language or communication challenges may interact with those factors and further aggravates vulnerability to abuse.

Globally, GBV is occurring at alarming rate. GBV is a serious psycho-social and health problem observed in developed and under developed countries against WWDs and WWODs. Research findings depicted that GBV affects 10% to 69% of women in their lifetime (Garcia-Moreno et al., 2005). According to recent estimates nearly one in three women has experienced one form of physical and/or sexual violence in their lifetimes within the context of an intimate relationship (Nur, 2015). Even though it may vary in different corners of the world, the above representative studies highlight the extent of the problem.

The problem seems more devastating in sub-Saharan African countries, where economic, social and health problems are common. For example, a research in West Africa, Togo revealed that 78% of the study participants reported that they experienced physical violence (Moore, 2008). In another study conducted on women attending in four antenatal clinics in Soweto, South Africa 55% of the women reported that they were physically or sexually violated by their partners (Dunkle et al., 2004). A study in Kenya among 15-45 years old women reported that 43% experienced some form of GBV in their life time, 29% previous years, 16% of women reported having ever been sexually abused and 13% of them had happened in the last year (Askew & Ndhlovu, 2006). In addition, in rural Tanzania, 47% of ever partnered women have ever experienced physical violence by an intimate partner while 31% have ever experienced sexual violence (Garcia-Moreno et al., 2005).

Even more than the aforementioned African countries, the problem of GBV seems more devastating in Ethiopia, where the legal, health and related social systems are relatively at infant stage. For instance, results from numerous community-based studies reveal that 50% to 60% of Ethiopian women experience GBV in their lifetime (Deyessa, Kassaye, Demeke, & Taffa, 1998; Gossaye et al., 2003; Yigzaw et al., 2004). A school-based study involving 1,401 randomly selected female high school students in central Ethiopia clearly indicated the seriousness of the problem. The result revealed that sexual harassment was reported by 74% of the participating female students (Ashenafi, 2004). On top of this, WHO's multi-country study among women who reported sexual intimate partner violence ever depicted that Ethiopia is the leading country (59%) followed by in Bangladesh (50%) and the least in Japan (6%) (WHO, 2012). Another global WHO research report revealed that nearly 49% of ever-partnered women experienced physical violence by a partner at some point in their lives, and 29% during the specified 12 months. More than half, (i.e.59%) of ever-partnered women experienced sexual violence at some point, and 44% during the past 12 months (Garcia-Moreno et al., 2005).

A systematic review of fifteen articles from 2005-2011 in Ethiopia revealed that life time prevalence of domestic violence against women without disabilities by husbands or intimate partner ranged from 20 to 78%, the lifetime physical violence ranged from 31 to 76.5 %, the life time sexual violence 19.2 to 59% and the mean life time prevalence of emotional violence was 51.7 % (Agumasie & Bezatu, 2015). The same review also indicated that one in five women experienced forced sex and experienced violence during their pregnancy period. A study conducted on women attending voluntary counseling and testing services in six health institutions in Addis Ababa reported the prevalence of lifetime intimate partner physical and

sexual violence as 54.6% and 41% respectively (Amid, 2005). All these research findings confirmed that the condition of GBV is shocking mainly in the third world countries like in Ethiopia. It seems one component of women's day to day activity.

The extent of GBV seems even more devastating among WWD. Research findings also reported that women with disabilities experienced more lifetime, 5 year, and past year physical and sexual violence compared with women without disabilities. In a similar fashion, UN (2006) report indicated that over half of women with disabilities have been victims of physical abuse at some point in their lives, a higher rate than the estimated prevalence among women without disabilities.

A research conducted in US among women with and without disabilities reported that WWDs had more than 4 times experiencing sexual assault in the past year compared to WWODs (Martin et al., 2006). Another study conducted in Spain revealed that almost 80% of women with disabilities were victims of violence, and that they were four times more likely than other women to suffer sexual violence (Ferres et al., 2013). Research findings also revealed that 68% to 83% of women with disabilities were sexually assaulted during their lifetime; this represents a 50% higher rate than the rest of the population (Brownridge, 2006).

There was also variation in prevalence rate of GBV even between women with disabilities. For example, women living with developmental disabilities such as autism and intellectual disabilities were more exposed to physical and sexual violence than other types of disabilities (Hughes, Lund, Gabrielli, Powers & Curry, 2011; Astbury & Walji, 2013). Pacific Island Report also demonstrated that women with intellectual and psychiatric disabilities were

particularly vulnerable to physical and sexual violence and women with disabilities in general were less likely to access support than their peers without disabilities (UNDP, 2009).

The problem of GBV among WWD is more overwhelming and one component of their day to day activities. For instance, a meta-analysis of 21 articles on violence against women with disabilities between 2000 and 2010 indicated that the prevalence of any type of violence among women with disabilities ranged from 26.0%–90.0% for lifetime and 2.0%-70.0% for the past year (Hughes et al., 2011). This shocking finding indicated the need of integrated work among all stockholders to alleviate the problem. The extent of GBV among WWD in developing countries like in Ethiopia was not given due attention even by scholars. Consequently, it is very difficult to get research study that revealed the comprehensive picture of GBV and its consequence among WWD. The extent of the problem among women with different disabilities and its consequences were not investigated yet.

Mental health is a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community (WHO, 2001, p 1). On the other hand, the term ‘mental health problem’ is used to describe a broad range of emotional and behavioral difficulties. Mental health problems encompass less severe emotional and behavioral problems as well as ‘mental illnesses’ and ‘mental disorders’, which generally refer to severe and/or persistent states with clinically recognizable sets of symptoms (Keleher & Armstrong, 2005). Ristock (1995) defined mental health problem and mental disorder. Mental health problem results from the disruption of effective interaction of individual, group and environmental factors

due to causes internal to the individual (e.g. inadequate coping skills) or external causes (for instance, unjust social structure, family or community tensions). On the other hand, mental disorder is a recognized, medically diagnosable illness that results in the significant impairment of an individual's cognitive, affective or relational abilities that result from biological, developmental and/or psychosocial factor (Ristock, 1995).

Depression, anxiety and PTSD were among the most common mental health problems. According to Nolen-Hoeksema (2004) depression includes a variety of emotional symptoms (sadness, loss of interest or pleasure for usual activities, irritability) physiological symptoms (sleep disturbances, appetite disturbances, fatigue and loss of energy) and cognitive symptoms (poor concentration, and attention, sense of worthlessness or guilt, hopelessness, suicidal thought). The same author in the same literature also define anxiety as a state of apprehension, tension and worry that has symptoms such as somatic (heart rate increases, pupils dilate, bladder relaxes), emotional (terror, sense of fear) cognitive (anticipation of harm, fear of losing control, fear of dying) behavioral (escape, avoidance, aggression and freezing).

The other mental health problem was PTSD. PTSD is re-experiencing of the traumatic event (distressing memories of the event, distressing dreams about the event, intense psychological and physiological distress when exposed to situations reminiscent of the event), emotional numbing and detachment (for example, avoidance of thought, feelings or conversations about the event, sense the future is black, trouble recalling important aspects of the event), hypervigilance and chronic arousal (staying asleep, outburst of anger, difficulty of concentrating (Nolen-Hoeksema, 2004).

Self-esteem (positive or negative self-evaluation) has direct impact with mental health status. According to Mann and his colleagues, positive self-esteem is not only seen as a basic feature of mental health, but also as a protective factor that contributes to better health and positive social behavior through its role as a buffer against the impact of negative influences (Mann, Hosman, Schaalma & Vries, 2004). On the contrary, poor self-esteem can play a critical role in the development of an array of mental health problem and social problems, such as violence, substance abuse and high-risk behaviors.

Concerning the prevalence rate of mental health problems (depression, anxiety and PTSD) and self-esteem among women who experienced GBV, the existing research studies confirmed that there was high intensity of mental health problem. Research studies revealed that violence against women has significant mental health impacts on the victims. For example, a research report from Michigan State University showed that between 17% and 65% of women with a lifetime history of sexual assault developed PTSD, 13%-51% met diagnostic criteria for depression, 73%-82% developed fear and/or anxiety and 12% to 40% experienced generalized anxiety, 13% to 49% of survivors became dependent on alcohol, and 23%-44% of them experienced suicidal ideation (Campbell, Dworkin, & Cabral, 2009). These findings confirmed the severity of the problem even in developed countries where many of the human right violations in relation to GBV seem uncommon.

A meta-analysis study on intimate partner violence and risk factors for mental health problem among women without disabilities depicted that “the prevalence of mental health problems among women with a history of intimate partner violence, finding the weighted mean

prevalence of 47.6% in 18 studies of depression, 17.9% in 13 studies of suicidality, 63.8% in 11 studies of PTSD, 18.5% in 10 studies of alcohol abuse and 8.9%'' in 4 studies of drug abuse (Golding, 1999, p. 99). The other systematic review reported that out of the total women who experienced physical violence 12.5-66.4% met the diagnostic criteria for depression (Delara, 2016). In relation to anxiety disorder, Meekers, Pallin and Hutchinson, (2013) in Bolivia, categorized symptoms of this disorder in their sample and reported that 53.5% of victims had feelings of fear without apparent reason and 66% scared easily. A cross-sectional study based on the Australian National Mental Health and Well-being Survey reported that for women exposed to 3 or 4 types of GBV (n=139), the rates of mental disorders were 77.3% for anxiety disorders, 52.5% for mood disorder, 47.1% for substance use disorder, 56.2% for PTSD, 89.4% for any mental disorder, and 34.7% for suicide attempts (Rees et al., 2011). All these research findings confirmed that GBV is a factor that affects the normal mental health status of women who experienced the problem.

Research conducted on the impact of GBV on women's mental health is hardly available in Ethiopian context. However, two researches conducted on high school and University students in Eastern and Southern part of the country confirmed the association of GBV with mental health problems and also self-esteem. A research conducted on sexual violence among female students in Eastern Ethiopia, Dire-Dawa city administration revealed that there was a statistically significant difference between adolescents with and without sexual abuse history on self-esteem, depression, anxiety, shyness and loneliness and social dissatisfaction (Mesfin, 2015). The other research conducted in Awassa Ethiopia among 1,102 female undergraduate students who were victims of GBV reported that experiencing of any GBV were

nearly twice as likely to be classified as having moderate depression during the academic year as compared with non-abused students (Gelaye, Arnold, Williams, Goshu, Berhane, 2009). The same research also reported that compared with non-abused students, those who had experienced both physical and sexual abuse were 4 times more likely to report either moderately severe or severe depressive symptoms (Ibid). Thus, all the above researches from different corners of the world confirmed that there was strong relation between GBV and mental health problems, depression, anxiety and PTSD and also self-esteem on women who faced the problem.

Regarding the prevalence rate of mental health problems and status of self-esteem among women with disabilities who experienced GBV, the existing research findings confirmed that there was high intensity of mental health problem. For instance a research result conducted in Cambodia revealed that out of 177 women with disabilities, a quarter of women reported physical illness as a result of domestic conflicts, 66% reported becoming anxious, fearful or depressed, 68% reported being unable to sleep, and 12% admitted to feeling suicidal (Astbury & Walji, 2013). This research finding implies that women are highly vulnerable to different physical, mental as well as psychological related health problems as a result of GBV.

A research conducted in Spain on GBV against women with visual and physical disability also reported that abused WWD showed a higher frequency of psychological problems, and lower perceived social support, psychological well-being, and self-esteem, than non-abused women (Ferres et al., 2013). This research also reported that women with physical disabilities reported more health problems than women with visual disabilities, including psychological problems, physical problems, and sever health problems; they also reported more frequent drug use, lower psychological well-being, and lower self-esteem. Even though there is lack of

research findings regarding the mental health status of women with disabilities in Ethiopian context, where low economic status, disease and violence are almost common, higher prevalence of depression, PTSD, anxiety and low self-esteem can be expected among women who experienced GBV.

Despite the seriousness of GBV and its association with mental health problems on the victims, currently there is little empirical information documented whether WWDs and WWODs differ on their vulnerability to GBV and mental health in Addis Ababa. This is because most studies examining violence against women excluded people with disabilities. In addition, the existing very few researches did not try to see the problem of GBV and its association with mental health among WWDs and WWODs. In Ethiopian context most GBV related researches focused on general population. These researches also ignored or gave less emphasis for the impact of GBV on mental health (Bizu, Arnold, Williams, Miruts, & Yemane, 2009).

Consequently, there is knowledge gap regarding the extent of GBV and its association with mental health status among women with and without disability in Ethiopian context. Therefore, the intention of this research work is to make visible the extent of GBV among WWDs and WWODs and also to observe the association of GBV with mental health problems specifically with depression symptoms, anxiety, PTSD and also the level of self-esteem in the study area.

1.2 Statement of the Problem

In Ethiopia women are the base of a society and forerunner of the family welfare in different aspects. They are base or foundation for continuity of a society or life in general. For instance, in Ethiopian cultural society women are contributing a lot for the sustainability and continuity of a family in economic, upbringing of children and perpetuation of generation and the like. Contrary to their contribution, they have experienced GBV and related human right violation. Despite the fact that GBV is common in rural, urban, among youth, adults, married, single, WWDs and WWODs, the problem is given relatively less attention in Ethiopian.

Now days in Ethiopia violence, injury, death and related human rights violations are common phenomenon as a result of poverty, culture of male superiority, forced migration displacement and political instability. It is common to hear violence, injuries and death of tens and hundred almost every days and weeks via mass media. In most cases, these conditions can exacerbate the rate of GBV. Contrary to these fact, most of mistreatment related behaviors that are performed by abusers are not considered as abuse. It is an extreme human rights violation which needs due attention and urgent intervention from the concerned bodies. The existing reality on the ground depicted that GBV is a serious social and health problem that threaten the life of many women. This could be because in Ethiopia the culture and the attitude of the community give more freedom for male to control their wives/partners behavior violently. Moreover, the women themselves seem accept male superiority.

Accepting violence as normal and unable to report the case to the concerned bodies can aggravate the problem. Compared with the prevalent nature of GBV, it seems less reported for legal system or other concerned bodies. The main reasons could be, women's economic

dependency on their abuser, fear of the consequences, disability related dependency such as dependency for care, movement and the like, lack of knowledge about their legislative right not to be violated and considering the problem as if it were common to all women and the like. Such under reporting in turn, can aggravate the problem by failing to ensure for the appropriate punishment of perpetrators since their crime goes unnoticed and unpunished.

The problem of GBV seems more deep-rooted in Ethiopian context. Practical observations revealed that the problem of GBV especially sexual violence is commonly observed on women with and without disabilities everywhere. For example, a systematic review of studies in Ethiopia revealed that one in five women experienced forced sex and experienced violence during their pregnancy period (Agumasie & Bezatu, 2015). The problem is also prevalent in Addis Ababa. For instance, doctors at the Fistula Hospital in Addis Ababa operate on approximately 1, 200 Fistula patients in a year (UNFPA, 2010). This figure promulgate to what extent the problem is prevalent among women in the study area.

In Ethiopia women with disability are experiencing triple-jeopardy. They can face GBV like other women because of their gender. They may not get equal access and opportunities for different privileges such as economic, education and decision making like that of their male partners and mostly involve in routine household tasks. In addition, many women with disabilities are living in a very serious economic problem in Addis Ababa. For instance, it is common to observe many people with and without disability while they are living and begging on the street. In addition, one can easily observe hundreds and thousands of homeless women, children and elderly people around religious institutions and on the street. Even many women without disabilities seem involved in non-income generating activities at home such as preparing

food, and rearing children. Such poor economic status and economic dependency can create fertile ground that exposed them for GBV. The other triggering factor could be prejudice and dependency on other individuals associated with disability. In Ethiopia people with disabilities can be considered as recipients of charity or objects of others' decisions instead of holders of rights, which in turn favors the perception that they are incapable of adopting decisions autonomously. For instance, communication barriers experienced by persons with visual and hearing disabilities can lead them being targeted in the belief that they will not be able to report for the concerned bodies especially for the legal system. Therefore, these intertwined factors can contribute negative impact and worsen the problem of WWDs that heighten the rate of GBV.

In some circumstances, mental health problem by itself can be a condition that exposes women for GBV. For example, women living with severe mental health problem may not be able to consciously control themselves. Such emotional states can create conditions that expose them for GBV. In other words, mental health problem can increase women vulnerability for GBV.

GBV among WWDs and WODs can produce short-term and long-term consequences such as physical health, mental health and social problems. Women who experienced GBV can result in different reproductive health complication such as unwanted pregnancy, abortion, birth complication and the like. Furthermore, women can also experience physical health problems like infected by sexually transmitted disease including HIV/AIDS, genital and non-genital injuries. GBV can have a direct relation with the high prevalent rate of mental health problem in Ethiopia. In Ethiopia, it is estimated that 15% of people are affected by major mental illness or substance abuse disorder (WHO, 2016). GBV can take a lion share for the existing devastating mental health problem in the country.

To alleviate the problem of GBV against women, cooperation and collaboration of all the stakeholders are required. The effort of governmental and non-governmental organizations in raising the awareness of the public and preventing GBV is a good start although a lot remains to be done to protect them from all forms of abuse and promote their well-being. Understanding the incidence, prevalence, associated factors of GBV and its association with mental health is essential as a basis for alleviating the problem by designing various intervention mechanisms.

As a consequence, various national and international organizations working on women and disabilities rights issues have been designing and implementing various activities in order to alleviate the problem. Different international and national legal instruments are also adopted and came into force in the country to protect women from all forms of GBV. Even with the adoption of these instruments, physical, psychological and sexual abuse is still devastating problem in the country and in the capital city Addis Ababa. The problem of GBV in Ethiopia is looks like an overlooked issue, under reported and in many cases it is considered as taboo.

Generally speaking, research studies on life events of women with and without disabilities in Ethiopia are very much limited. Studies that specifically focus on GBV against women and its effect on mental health are hardly available. Furthermore, the existing limited publications about the extent of GBV and its effect on mental health exclude women with disabilities. Consequently, such scarcity and lack of evidence based information in the area have created knowledge gap about the extent of the problems and difficulty for planning meaningful interventions for women who experienced the problem. Some of the weaknesses of the existing limited researches on domestic violence and mental health in Ethiopian context where the studies were performed on non-representative samples of women from different groups such as living

with visual, physical and hearing and without disabilities that too restricted to its association with one variable specifically depression.

Because of the above reality, there was knowledge gap regarding the prevalence and incidence rate of physical, sexual and psychological violence among women with visual, physical and hearing disabilities and women without disabilities in Ethiopia in general and the capital city, Addis Ababa in particular. Furthermore, there were no research studies available on the impact of physical, sexual and psychological violence on mental health status such as depression, anxiety, PTSD and also self-esteem. Because of the existing knowledge gap in this area less attention was given to design and implement intervention plan for the women who experienced GBV and associated mental health problems in the country. As a result, this research answered the following basic research questions:

1. What are the prevalence and incidence rates of GBV among women with and without disabilities in Addis Ababa?
2. Which type of violence is most commonly experienced by women with and without disabilities?
3. What are the extent of depression, anxiety, PTSD and self-esteem among women with and without disabilities who experienced and didn't experience GBV?
4. What is the association between GBV and mental health and self-esteem across some of the selected demographic variables of the study participants?
5. Is there statistically significant difference on the level of anxiety, depression, PTSD and self-esteem between women with and without disabilities who experienced violence?

6. What is the level of depression, anxiety, PTSD and self-esteem between women with disabilities who experienced and who didn't experience GBV?
7. Is there statistically significant difference on the level of anxiety, depression, PTSD and self-esteem among women with physical, hearing and visual disabilities who experienced GBV?

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of the study is to establish the prevalence and incidence rate of GBV and to investigate its association with mental health problems such as anxiety, depression, PTSD and also self-esteem among women with and without disabilities in Addis Ababa.

1.3.2 Specific Objectives

The specific objectives of the study are to:

- ✚ Establish the prevalence and incidence rate of GBV among women with and without disabilities in Addis Ababa.
- ✚ Compare the mental health problems such as depression, PTSD, and anxiety and also the level of self-esteem between women with and without disabilities who experienced GBV.
- ✚ Compare mental health problems such as depression, PTSD and anxiety and also self-esteem among women with physical, visual and hearing disabilities who experienced GBV.

- ✚ Compare the mental health problems such as depression, PTSD and anxiety and also the level of self-esteem, between women with disabilities with and without the experience of GBV.
- ✚ Identify the patterns of GBV experienced by women with and without disabilities.
- ✚ Identify the patterns of mental health problems and self-esteem among women with and without disabilities who experienced violence.
- ✚ Determine the level of mental health status among women living with visual, hearing and physical disabilities who experienced GBV?

In an attempt to explain, discuss, and predict GBV against women number of theories was formulated by scholars in the area. One of the major theories is the ecological theory of human development that coined by Bronfenbrenner's (1995). Many research studies have adapted this theory to develop multilevel models to study GBV and its consequences (Krug, Mercy, Dahlberg, & Zwi, 2002; Campbell, Dworkin & Cabral, 2009). The theory explains the cause of GBV from individual level up to multiple environments levels. The individual level comprises of bio-psycho-social characteristics of the person; the micro-system focuses on direct interpersonal interactions between individuals and members of their immediate environment such as families, friends, and peers; the meso-system reflects interconnections and linkages between individuals and between individuals and systems; the exosystem includes organizations and social systems (e.g., legal, medical, and mental health); the macrosystem includes societal norms, expectations, and beliefs that form the broader social environment; and the chrono-system encompasses the changes that occur over time between persons and their multiple environments (Bronfenbrenner's, 1995). To understand the overall nature of GBV and mental health the

following conceptual frame work was formulated. The conceptual frame work was formulated by the researcher himself.

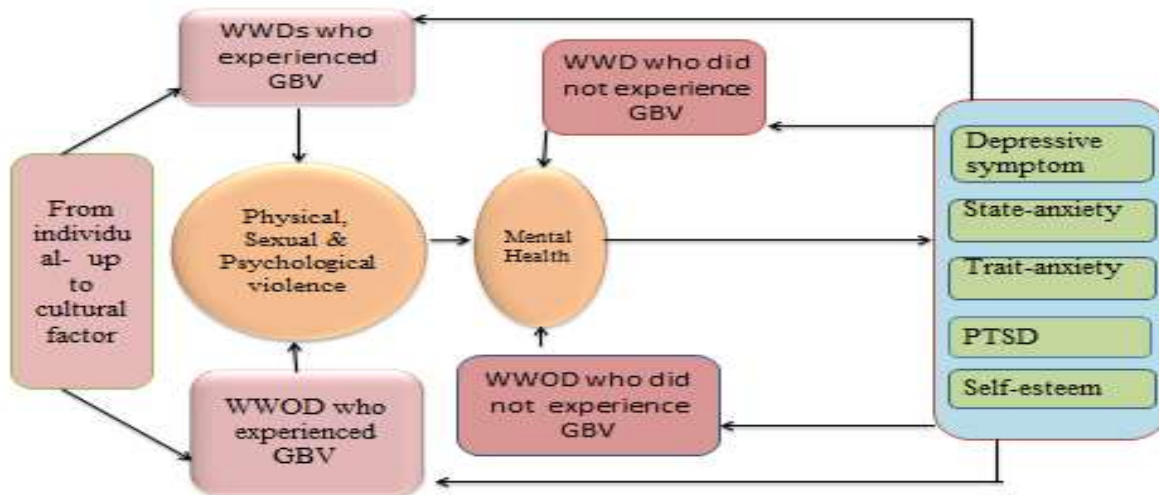


Figure 1 Conceptual frame work of the study

(Source: Developed by the researcher himself)

1.4 Significance of the Study

Research findings in the area of GBV and its association with mental health problem among women with and without disabilities are not available in Ethiopian context. It was not also possible to vividly state the incidence and prevalence rate of GBV between women with and without disabilities. The overall well-being of women with and without disabilities cannot be achieved without understanding the extent and nature of GBV and its association with their mental health status.

Thus, all those who are working towards the welfare of women with and without disabilities have to be aware the extent of GBV and its association with mental health problems that affect maintaining normal health status and carrying out of their daily life. Hence, the study becomes useful in alleviating the problem. For this reason, it is hoped that this study would answer some of the vital questions and fill the gap in our knowledge of the problem.

Therefore, this research study is expected to contribute additional empirical evidence in relation to the association of GBV and mental health problems such as depression, anxiety, PTSD and also self-esteem among women with and without disabilities. Various expected outcomes of the study can have different implications. For example, incidence, prevalence, and nature, and the like can have implications for primary preventive measures, including policy formulation. The outcomes of the study also predominantly can have implications for those who are working in the area of mental health problems and gender studies.

The study may be also vital for those involved in therapy, in family counseling, in rehabilitation counseling and community intervention. Finally, it is hoped that the findings of this study and their implications may provide some important directions for conducting further researches in the areas of women with disabilities and GBV, the association of GBV with mental health problems, the extent of GBV among women with and without disabilities and among women living with different disabilities types.

1.5 Delimitation of the Study

This research is confined to women with disability who were the members of Ethiopian National Associations of Visual Disabilities, the Ethiopian National Associations of Physical Disabilities, and Ethiopian National association for Hearing Disability. In addition, the research

delimited to women without disability who were resident of Addis Ababa. Even though, GBV is a comprehensive term and encompasses various types of violence, this research restricted only on physical, sexual and psychological violence. Though mental health is a multidimensional concept, only three mental health problems that are depression, anxiety and PTSD and self-esteem were investigated in to.

1.6 Operational Definitions of Variables

Anxiety-An unpleasant, high-arousal emotional state associated with perceived threat as measured by Spielberger's State-Trait Anxiety Inventory (STAI). The score ranges from 20 to 80 for both State and Trait Anxiety. Higher score on the state and trait anxiety indicates higher level of anxiety and lower the scores, lower level of anxiety.

Depression-It is a state marked by either a sad mood or a loss of interest in one's usual activities as well as feelings of hopelessness, psychomotor agitation or retardation and trouble concentrating (Spitzer, Kroenke & Williams, 1999). Depression was measured using nine-item depression module of the Patient Health Questionnaire (PHQ-9) designed for depression screening and monitoring. Higher score on the PHQ-9 indicates higher level of depression and lower the score, lower the level of depression.

Post-Traumatic Stress Disorder-It is victims' mental state that is characterized by repeated mental images of experiencing a traumatic event, emotional numbing and detachments and re-vigilance and chronic arousal as measured by 17 items PTSD

checklist: Civilian scale (PCL-C) (Weathers et al., 1993). Higher score on the PCL-C indicates higher level of PTSD and lower the score, lower the level of PTSD.

Self-esteem- Evaluation of one's self-concept, usually measured in terms of a relatively stable and global assessment of how a person feels about him or herself. For this research Rosenberg's (1979) self-esteem scale was used. The scale contains 10 items and the scores range from 0-30. Scores between 15 and 25 are within normal range, scores below 15 suggest low self-esteem and score greater than 25 indicate high self-esteem (Rosenberg, 1965).

Gender-Based Violence- is any acts that result in, or is likely to result in physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private (García-Moreno et al., 2005). GBV includes physical, psychological and sexual violence. WHO's GBV measuring instrument with three sub-scales measuring physical, psychological and sexual violence was used. Accordingly, physical, sexual and psychological violence are defined as follows:

Physical Violence- is any form of violent act which can result in physical harm including mild form (slapping and punching) or severe form (kicking/drugging, beating/hitting with any object, burning/chocking, and intimidating using a knife or gun and the like) as measured by WHO's instrument containing four items (García-Moreno et al., 2005). One Yes response would qualify for the presence of physical violence.

Sexual Violence: is defined as acts that are done by intentional use of physical force or power, intimidation or threatening to have sex or to engage in acts of sex without the consent of the girl or women. It includes attempted rape, completed rape and marital rape, and sexual harassment (García-Moreno et al., 2005). Sexual violence was measured by WHO's instrument with three items. One "Yes" response would qualify for the presence of sexual violence.

Psychological Violence-a form of violence that includes insult, disgracing, scaring, intimidating, impeding decision-making, verbal abuse and isolating a person from friends/family and related behavior Psychological violence was measured by WHO's three items. One "Yes" response would qualify for the presence of psychological violence.

Chapter Two

Review of Related Literature

Gender based violence has become a challenging social and health problem of many countries in the world. Nowadays many research studies have started focusing on gender related issues. Most of the existing researches were focusing on the extent of the problem on general populations. However, there is demand of studies that focused on the prevalence of the problem and its association with mental health problem among women with and without disabilities.

The primary concern of the current study is to make more visible the problem of GBV and its interrelation with mental health problems like depression, anxiety, PTSD and also self-esteem among women with disabilities and without disabilities. Then, to forward recommendation for the concerned bodies that can help them practically to give emphasis and lessen the problem.

Under this section the review of previous researches from national and international researchers, books and websites concerning GBV incidence rate, prevalence rate and its consequences on mental health problem and self-esteem among women with and without disabilities is treated. The review is started with the definition of GBV, and then describing the global and Ethiopian prevalence and incidence rate of GBV among women with and without disabilities. Then after, the consequences of GBV on mental health aspects such as depression, anxiety, PTSD and self-esteem were discussed. Furthermore, the issue of GBV against women with and without disabilities and its mental health consequences were observed based on

ecological theory. Finally, the findings from literature review were summarized and the directions for the present study were also highlighted.

2.1. Over View of GBV

Different international organizations which work on the right and protection of women defined violence in different ways. For instance, the Declaration on the Elimination of Violence against Women adopted by the United Nations General Assembly in 1993 defined violence against women as “any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life” (UN, 1993:10). This definition incorporated the various forms that violence can take on. Although intimate-partner violence and sexual coercion are the most common types of violence affecting women and girls, in many parts of the world, violence takes on special characteristics according to cultural and historical conditions, and includes murders, trafficking of women and girls, female genital mutilation, forced prostitution; economical segregation by the state, and violence against women in situations of armed conflict (García-Moreno et al., 2005).

On the other hand, a report from United Nation defines GBV categorizing into sexual violence, physical violence, emotional and psychological violence, harmful traditional practices and socio-economic violence. Sexual violence include rape, marital rape, child sexual abuse, forced sodomy/anal rape, attempted rape/attempted forced sodomy, sexual abuse, sexual exploitation, forced prostitution, sexual harassment and sexual violence as a weapon of war and torture (United Nation, 2011). The same literature described physical assault, beating, punching,

kicking, biting, burning, maiming or killing with or without weapons and trafficking and slavery under physical violence. In addition, insulting, degrading, and compelling the victim in humiliating acts whether in public or private, denying the basic expenses for family survival and confinement that is isolating the person from friends/family, restricting movements, deprivation of liberty or obstruction/restriction of the right to free movement were the elements of psychological violence (Ibid).

In addition, female genital mutilation (FGM), early marriage, forced marriage, honor killing and maiming (murdering a woman or a girl as a punishment for acts considered inappropriate with regard to her gender), infanticide/neglect and denial of education for girls or women were classified under harmful traditional practices (United Nation, 2011). Activities such as discrimination and/or denial of opportunities, services, social exclusion based on sexual orientation (denial of access to services or social benefits, prevention of the exercise and enjoyment of civil, social, economic, cultural and political right, imposition of criminal penalties, discriminatory practices) and obstructive legislative practice (prevention of the exercise and enjoyment of civic, social, economic, cultural and political rights by women were also categorized into GBV(Ibid).

The occurrence of GBV can be measured in different ways. “Incidence studies” estimate the number of new cases occurring in a given time period, usually a year. “Prevalence studies” estimate the proportion of a population that has been physically, sexually and emotionally abused in the course of their life time. Strictly, what is described in most studies of GBV is the cumulative incidence of abuse over the period of women, but the term prevalence is

widely used and cumulative incidence and prevalence evaluation have a similar interpretation, reflecting the proportion of those who report or disclose exposure to physical, sexual and emotional abuse at a given time (Mesfin, 2015; WHO, 2011). Therefore, the main similarity between prevalence and incidence rate of GBV is both measure the extent of GBV among the victims. On the other hand, their main difference is the extent (amount) of the problem for long period of time specifically for prevalence rate and the extent the problem within short period of time for incidence rate.

2.2 Overview of GBV: Global Scenario

At global level UN Women (2011) revealed that approximately 100 to 140 million girls and women have experienced GBV. Various researches have been conducted worldwide that revealed nature, extent and consequences of violence on women with and without disabilities. For instance, a review of over 50 population-based studies performed in 35 countries indicated that between 10% and 52% of women around the world reported that they have been physically abused by an intimate partner at some point in their lives, and between 10% and 30% have experienced sexual violence by an intimate partner. Between 10% and 27% of women and girls reported having been sexually abused, either as children or as adults (Heise & Garcia-Moreno, 2002). Relatively recent systematic review of data from different countries of the world revealed that overall, 35% of women worldwide have experienced either physical and/or sexual intimate partner violence or non-partner sexual violence (WHO, 2013).

Different population-based studies from various countries indicated that 10–69% of women aged 15–49 years experienced physical abuse by a male intimate partner at least once in

their lifetime (Heise & Garcia-Moreno, 2002) while 6–47% of women report attempted or actual forced sex by an intimate partner in their lifetime (Jewkes, Sen & Garcia-Moreno, 2002). A report by WHO, 2013 collaborated with London School of Hygiene and Tropical Medicine and South African Medical Research Council presents, systematic review and synthesis of the body of scientific data extracted from 79 countries on the prevalence of two forms of violence by an intimate partner (intimate partner violence) and sexual violence by someone other than a partner (non-partner sexual violence) (WHO, 2013). According to this report, the global lifetime prevalence of intimate partner violence among ever-partnered women was 30.0% (95% CI = 27.8% to 32.2 %). Concerning the distribution of the problem across the globe more women from the developing world like from Africa, Asia and Latin America experienced GBV than women from developed world such as Europe and Western Pacific countries.

Accordingly, the lifetime prevalence of physical and/or sexual intimate partner violence among ever-partnered women was reported as: South-East Asia 37.7%, Eastern Mediterranean 37.0%, Africa 36.6 %, Americas 29.8 %, Europe 25.4%, Western Pacific 24.6% and High income countries 23.2% (WHO, 2013). These numerical figures confirmed that the problem of GBV was relatively higher in third world countries from South-East Asia and Africa.

The problem of GBV is also common in most populated countries like China and India. According to the review studies from 87 countries in the world by UN, women revealed that the prevalence of physical violence against women was 15.4% in China (UN women, 2011). The same report also revealed that 35.1% studied women in India experienced physical violence and 37.2% reported physical and /or sexual violence during their life time.

The other research conducted by WHO, a multi-country study on women's health and domestic violence against women provided a comprehensive picture of the patterns of intimate partner violence and sexual violence victimization in low-and middle-income countries (García-Moreno et al., 2005). Over 24,000 women between the ages of 15 and 49 were interviewed in rural and urban areas in ten countries. Based on this study, between 1 and 21% of those interviewed reported experiencing child sexual abuse under the age of 15 years; physical abuse by a partner at some point in life up to 49 years of age was reported by 13–61% of interviewees across all study sites; sexual violence by a partner at some point in life up to 49 years of age was reported by 6–59% of interviewees; and sexual violence by a non-partner any time after 15 and up to 49 years of age was reported by 0.3–11.5% of interviewees.

The same study also presented the prevalence rate of physical and sexual violence from developed up to under developed countries in the world including Ethiopia. *Table 1* below presents, the prevalence and incidence rate of physical, sexual and either physical or sexual violence or both from four continents, Asia, Africa, Latin America and Europa. This tells us GBV is the serious problem of all human society. Poverty can be the cause for instability and conflict in the family that directly leads to GBV. For example, as indicated in *Table 1* below, women from developed countries like Japan reported the least prevalence and incidence rate of physical, sexual and either physical or sexual violence compared with all other studied countries. In addition, the problem of GBV seems more sever in provinces and rural areas than cities and urban inhabitants. As indicated in *Table 1* below, the prevalence and incidence rates of physical, sexual violence and either physical or sexual violence or both are listed in Bangladesh, Brazil, Peru and Tanzania provinces compared with their respective cities. Thus, poor economic status

and residential location (living in rural area) have the probability of triggering the problem of GBV.

Table 1 *Global Overview of Prevalence and Incidence Rate of GBV*

Site	Physical violence		Sexual violence		Physical or sexual violence or both	
	Ever (%)	Current (%)	Ever (%)	Current (%)	Ever (%)	Current (%)
Bangladesh City	37.7	19.0	37.4	20.2	53.4	30.2
Bangladesh Province	41.7	15.8	49.7	24.2	61.7	31.9
Brazil	27.2	8.3	10.1	2.8	28.9	9.3
Brazil Province	33.8	12.9	14.3	5.6	36.9	14.8
Ethiopia Province	48.7	29.0	58.6	44.4	70.9	53.7
Japan City	12.9	3.1	6.2	1.3	15.4	3.8
Namibia City	30.6	15.9	16.5	9.1	35.9	19.5
Peru City	48.6	16.9	22.5	7.1	51.2	19.2
Peru Province	61.0	24.8	46.7	22.9	69.0	34.2
Serbia & Montenegro City	22.8	3.2	6.3	1.1	23.7	3.7
Thailand Province	33.8	13.4	28.9	15.6	47.4	22.9
Tanzania City	32.9	14.8	23.0	12.8	41.3	21.5
Tanzania Province	46.7	18.7	30.7	18.3	55.9	29.1

Source: (García-Moreno et al., 2005)

The other important finding from García-Moreno et al. (2005) study is that the extent of GBV in Ethiopian context compared to developed country like Japan, and other developing countries from other continents and African country specifically Tanzania, the problem of GBV in Ethiopia was higher in its intensity. The prevalence and incidence rate of physical, sexual and either physical, or sexual or both indicated that more than all other studied countries highest score was reported in Ethiopian province. The prevalence and incidence rates of physical, sexual violence by an intimate partner ranged from 15% in Japan to approximately 70% in Ethiopia and Peru (García-Moreno et al., 2005).

GBV is most of the time perpetrated by partners and family members than strangers. WHO (2013) report further stated the global lifetime prevalence of intimate partner violence among ever-partnered women was 30.0% (95% CI = 27.8% to 32.2 %.). The same report also revealed that globally, 7% of women have been sexually assaulted by someone other than a partner.

Generally speaking, GBV is problem against humanity that is mostly observed on women without discrimination, such as race, economic, health status and related parameters that mostly accomplished by intimate partners in all developed, developing and under developed countries in the world. Furthermore, the problem and its consequence become more devastating in African countries like Ethiopia where, millions of women living in poor economic status, uneducated, living with disabilities and unequal treatments and discrimination are common. Besides, women who were residents of rural areas can be more vulnerable for GBV than women who were living in urban areas. Similarly, women from developing countries can be more exposed for GBV than women from developed countries.

2.3 GBV in Africa

In spite of the fact that GBV is a common problem of developed, developing and under developing countries, the problem seems more severe in African. According to Krug et al., (2002) certain community and societal factors are associated with higher or more severe rate of GBV. Africa could be fertile ground where traditional gender norm that support male superiority and entitlement, social norms that tolerate violence against women, weak community sanction against perpetrators, poverty, high level of crime and conflict are common. In Sub-Saharan

Africa, 14.1 million girls are child brides, married before the age of 18 (UN Women, 2011). The same report also revealed that more than 3 million girls in Africa are annually at risk for at least one type of violence.

A research finding at different parts of South Africa reported that 77% of women in Limpopo, 51% in Gauteng, 45% in the Western Cape and 36% in KwaZulu-Natal had experienced some form of GBV (Gender Links, 2012). Another survey study among 1,306 women in three South African provinces found that 27% in the Eastern Cape, 28% in Mpumalanga and 19% in Limpopo had been physically abused in their lifetime by a current or ex-partner (Abrahams, Jewkes, & Laubsher, 1999) The same study investigated the prevalence of psychological violence experienced by women in the year prior to the study and found that 51% of women in the Eastern Cape, 50% in Mpumalanga and 40% in Limpopo were subjected to these types of abuse (Abrahams, Jewkes & Laubsher, 1999)

The UN Women (2011) report based on review of national and the Demographic and Health Surveys in 87 countries in the world revealed that in all corners of Africa, the problem of GBV was found relatively at highest level.

Women also experienced GBV during pregnancy and that has devastating impact on their life as well as on the life of their fetus. According to UN women report (2011) women in Africa experienced the highest rate of abuse during pregnancy than any continent in the world. For instance, the same report revealed that the rate of violence during pregnancy in Uganda was 15.7%, United Republic of Tanzania 12.3% and Democratic republic Congo 12% compared with non-African countries like Bangladesh 12.4%, Brazil 11.1% and Solomon Islands 10.7% (UN

women, 2011). Similarly, concerning forced first sex women from African countries were reported the higher rate of violence next to Bangladesh 30%, Uganda 24%, followed by Zimbabwe 24 % (Ibid).

According to UN women report (2011) the Eastern Africa region was more prevalent than the other regions of the continent for lifetime physical and/or sexual violence from an intimate partner. Astonishingly, GBV specifically physical and sexual violence in Ethiopia were more devastating than even its neighboring and regional countries. The reality in Ethiopia in relation to GBV therefore, promulgates the need of further research investigation on the extent, causal factors as well as on its multi-directional consequences in different social, cultural as well as geographical locations in the country.

2.4 GBV among General Women Population in Ethiopia

Recognizing the importance of researching on GBV, Ethiopian researchers undertook a series of studies to preliminarily assess the prevalence and patterns of GBV across the country. Results from these studies stressed that the burden of GBV borne by Ethiopian girls and women were among the highest globally. These Ethiopian scholars have consistently noted that 50% to 70% of Ethiopian women experienced GBV in their lifetime (Deyessa et al., 1998; Gossaye et al., 2003; Yigzaw, Yibrie, & Kebede, 2004).

Ethiopia was one of the ten countries participated in the World Health Organization's Multi-Country Study on Women's Health and Domestic Violence against Women (Garcia-Moreno et al., 2005). In that study, with a sample of 2,261 ever-married or partnered women (mean age 32.4 years) from Butajira, Ethiopia, a densely populated, largely rural district located

approximately 130 kilometers south of Addis Ababa, 71 % reported experiencing GBV in their lifetime (Garcia-Moreno et al., 2005).

A research in Eastern Ethiopia also revealed that higher prevalence rate of lifetime and past 12 months prevalence of intimate/husband violence against women was 76.5 % and 72.5 % respectively which is even higher than finding from multi-country study by WHO around South West Ethiopia (Abeya, Fantahun & Worku, 2011).

A systematic review of thirteen researches in Ethiopia from 2000 to 2014 that was published and obtained from databases and two consecutive Ethiopian demographic and health surveys (2005 and 2011) reported that husband or intimate partner violence among 10 studies ranged from 20 to 78 % (Agumasie & Bezatu, 2015). Regarding the cause of GBV in the context can be related with many factors such as personal, cultural and economic related factors. Similarly, Agumasie and Bezatu (2015) in their systematic review of articles in Ethiopia reported that domestic violence against women is significantly associated with alcohol consumption, Khat chewing, family history of violence, educational status, residence and decision making power.

In Ethiopia, physical violence seems a means of correcting mis-conduct observed on women and children. As a result it is observed in many parts of the country as if it were normal practice. Consequently, many research publications confirmed that the problem is found at highest level. For instance, a research conducted by WHO in multi-country study in Butajira, Ethiopia found that 35% of all ever-partnered women experienced at least one severe form of physical violence (being hit with a fist or something else, kicked, dragged, beaten up, choked,

burnt on purpose, threatened with a weapon or had a weapon used against them (Garcia-Moreno et al., 2005). The same study also reported that 49% of ever-partnered women experienced physical violence by a partner at some point in their lives, and 29% during the past 12 months.

On the other hand, a study conducted on women attending VCT services in six health institutions in Addis Ababa depicted the prevalence of lifetime intimate partner physical violence as 54.6% (Amide, 2005). A systematic review of thirteen published studies from 2000 up to 2014 in Ethiopia reported that the lifetime domestic physical violence by husband or intimate partner against women ranged from 31 to 76.5 % (Agumasie & Bezatu, 2015). Thus, these data confirmed that physical violence is a highly prevalent problem among Ethiopian women even more than any other country in the world.

In addition to physical violence, sexual violence is also common that women experience like that of their common day to day activities in Ethiopia. One of the most comprehensive studies in relation to GBV by WHO revealed that 59% of ever-partnered women experienced sexual violence at some point, and 44% during the past 12 months (Garcia-Moreno et al., 2005). Mulugeta, Kassaye and Berhane (1998) in their study of high school students in Addis Ababa and Western Showa reported that the prevalence of sexual harassment was 74% and that attempted rape (10%) and rape (5%) were also prevalent in their study setting. Moreover, Worku and Addisie (2002) reported that approximately 9% of female high school students in Debark, North-Western Ethiopia reported being raped and 12% reported escaping attempted rape. Of the students who reported being raped, the authors found high frequencies of unwanted pregnancies (21%), attempted suicide (16%), abnormal vaginal discharge (11%), and abortion (5%) (Worku

& Addisie, 2002). These findings indicated to what extent the problem of GBV is deep-rooted and threatened the life of the victims. Furthermore, GBV can also be a source of personal as well as societal obstacle like suicide, unwanted pregnancy and abortion that detract the personal development of individuals.

On the other hand, a study conducted on women attending VCT services in six health institutions in Addis Ababa depicted that the prevalence rate of lifetime intimate partner sexual violence was 41% (Amide, 2005). This researcher also found that out of the total study participants 21.8% of women reported experiencing forced sex or rape at their first sex. Another relatively recent study by Deribe et al. (2012) in South-West Ethiopia revealed that the lifetime sexual violence (50.1 %) was considerably higher than physical violence (41.1%). A systematic review of thirteen published studies from 2000 up to 2014 in Ethiopia reported that the life time domestic sexual violence against women by husband or intimate partner ranged from 19.2 to 59 % (Agumasie & Bezatu, 2015). Similar to physical violence, these researches confirmed that the problem of sexual violence is also very much prevalent in Ethiopia.

Compared to physical and sexual violence psychological violence was less researched in Ethiopia context. This may be because of insulting, degrading and humiliating women by their husband/partner may not be taken as violence or considered as common verbal communication even by the victims. Furthermore, many people may not have information on its long term consequences. Subsequently, researches that focused on the prevalence and incidence rate of psychological GBV are hardly available in Ethiopian context. However, the limited available research findings indicated harshness of the problem that has direct relation with

mental health problem of the victims. A systematic review of thirteen studies in Ethiopia from 2000 up to 2014 reported that the mean life time prevalence of domestic emotional violence was 51.7 % (Agumasie & Bezatu, 2015). The other study conducted in Western Ethiopia both in rural and urban population reported that the overlap of psychological, physical, and sexual violence was 56.9 %.

Thus, all the above research findings revealed that GBV in Ethiopia is a serious problem that contributes to adverse physical, reproductive, and mental health problems on the victims. In addition, compared with other international researches, all the three violence, physical, sexual and psychological are found at a highest prevalence rate. This devastating condition implies the need of further investigation on its extent, consequences and mechanisms of alleviating the problem.

There are many predispose conditions that make women vulnerable for GBV. In many aspects women are the backbone of a society and vanguard of the family welfare. However, their mental and physical health was harmed by physical, sexual and psychological violence from their male counterpart (Gossaye et al., 2003). The same study also reported that women in developing countries suffer a lot from unfavorable conditions due to underdevelopment, traditional and cultural sanctions and poverty.

GBV is committed by partner, ex-partner, family members and stranger at all places such as on the street, at home and at workplace (Gossaye et al., 2003). Research studies confirmed that women in general experienced violence because of various reasons such as their economical dependency, lack of accessible education, lack of social support, partners' employment status

and drug and alcohol use, cultural related factors such as society's attitude towards gender role (García-Moreno, et al., 2005; Gossaye et al., 2003; Campbell, 2002).

2.5 GBV against Women with Disabilities

According to WHO (2011) world report on disability, more than a billion people are estimated to live with some form of disability, or about 15% of the world's population and 18% of the population of developing countries live with disabilities (based on 2010 global population estimates). The same report also notes that there are significant differences in the prevalence rate of disability between men and women in both developing and more developed countries; the male disability prevalence rate is 12 %, while the female prevalence rate is 19.2 %. This implies that women with disabilities are highly vulnerable for GBV as a cumulative effect of living with disability as well as their gender.

According to Handicap International (2015) people with disabilities are estimated as at least 15% of the world's population. The same report also revealed that 80% of them live in developing countries and are often exclude from access to education, work, healthcare, social assistance and the legal system. Person with disabilities include “those with long-term physical, mental, intellectual or sensory impairments which interact with various barriers may hinder their full and effective participation in society on an equal bases with others” (WHO, 2011, p.18).

A systematic review of research studies that focused on GBV among women with disabilities depicted that the extent of violence against women varied depending on the timeframe, the definition and type of violence, perpetrator, and type of disabilities (Hughes et al., 2011). For instance, the same study reported that the prevalence rate of any type of violence

among women with disabilities ranged from 26.0%–90.0% for lifetime and 2.0%-70.0% for the past year (Ibid). Such a huge gap across studies is an indicator for the presence of serious problem of GBV among WWD especially in developing world. Furthermore, it also confirmed the need of consistent and collaborative work to alleviate the problem especially in developing countries like in Africa where most peoples with disabilities seem found at poor economic status.

The prevalence of GBV among women with and without disabilities and among different disability types varies because of different contributing factors. Currently there are limited researches that compared the prevalence and incidence rate of physical, sexual and psychological violence among women with and without disabilities. In addition, most of the available studies were also small scale researches that lack detail analysis of the issue using specific method to uncover the extent and context of violence in an appropriate sensitivity and ethically responsible ways (Schröttle, & Glammeier, 2013; Martin et al., 2006). The large scale population studies reported that women with disabilities experienced more GBV than women without disabilities (Kvam, 2005; Schröttle, & Glammeier, 2013). A report by the European Parliament, indicated that almost 80% of women with disabilities were victims of violence, and that they are four times more likely than other women to suffer sexual violence (Martin, et al., 2006). A representative study in Germany by Schröttle and Glammeier (2013) among women with and without disability is reviewed and the findings are presented in *Table 2* as follows:

Table 2

Prevalence rate of GBV among Women with Disabilities

	General opulation N=8,445(%)	Women living with hearing Disability N=83(%)	Women living with visual disability N=128 (%)	Women living with sever physical Disability N=130 (%)
Psychological abuse	45	84	88	78
Psychological abuse by intimate partner	13	45	33	28
Physical Violence	35	75	66	59
Physical Violence by intimate partner	13	41	22	25
Sexual Violence	13	44	29	29
Sexual Violence by intimate partner	4	19	13	14

Source: (Schröttle, & Glammeier, 2013)

According to Schröttle and Glammeier (2013) 45% of WWOD experienced psychological violence. However, 84%, 88% and 78% of women living with hearing, visual and physical disabilities respectively experienced psychological violence. Regarding physical violence, 75%, 66%, and 59% women living with hearing, visual and physical disabilities respectively experienced the problem. Contrast to this only 35% of WWOD experienced physical violence. In addition, 13% of WWOD experienced sexual violence. However, 44%, 29% and 29% of women living hearing, visual and physical disabilities respectively experienced sexual violence. All these findings indicated that WWD were relatively more vulnerable for psychological, physical as well as sexual violence than WWOD. Furthermore, psychological violence was the most prevalent than physical as well as sexual violence for all WWDs and WWOD.

Another study conducted in Cambodia reported that women with disabilities experienced more psychological violence (48.9%) compared with (41.8%) women without disabilities

(Asbury & Walji, 2013). Research also indicated that psychological abuse by partners was reported most often by women with hearing and visual disabilities (Schrötle & Glammeier, 2013). One interviewee in study by Asbury and Walji (2013, p, 23) described her experience of emotional violence by family member as,

“My mother doesn’t care about me the way she does about my brother. I have to do everything myself including cooking, cleaning, washing and ironing while my mother does everything for my brother. One day I said to her in tears, “Mum, I am angry that I have to do everything by myself and you do everything for my brother.” She thought about that and started to take care of me for a while, but then it went back to the same thing. I think she does that because she thinks she can depend on him when she gets old, but not on me because I have a disability.”

In addition to psychological violence, women with disabilities can also be more vulnerable for physical as well as sexual violence. The study by Schrötle and Glammeier (2013) also reported that, 13% of women in the general population experienced physical violence by intimate partners compared to 22 to 41% reported by women with disabilities, which is a two-to more than threefold higher risk of violence. The other study in Cambodia revealed that women with disabilities experienced more physical violence (26.6%) compared with 23.4% women without disabilities (Asbury & Walji, 2013).

Another research finding in US using telephone survey among 219,911 women without disabilities and 49,756 of whom identified themselves as having an activity limitation or

disability was conducted to investigate the prevalence of physical and sexual violence (Smith, 2008). Results showed that women with disabilities were 2.05 times more likely to be physically abused and 2.38 times more likely to experience unwanted sex. The variation may be due to different personal, situational, socio- cultural contributing factors. For instance, people living with disabilities may not be given equal respect and value like other people. Consequently, their problem may not be taken as a serious issue. One young woman in a study by Asbury and Walji (2013, p, 23) during the interview described her experience of physical violence by family member as:

“My mother hit me many times. I don’t know the reason at all. But I do remember that she wasn’t happy that I couldn’t do things like other people. She didn’t understand I couldn’t see like other people, but I really tried my best. I was really suffering and couldn’t stay with my parents any longer. I ran away to an NGO in Phnom Penh where my eyes were operated on. My aunt found out about this and sent me back home even though I didn’t want to go.”

Concerning sexual violence, the study in Germany depicted that, 4% of the general female population reported forced sexual acts by intimate partners compared with 13 to 20 % of women with disabilities, which represents a three to five fold higher risk of sexual violence through intimate partners for women with disabilities (Schrötte & Glammeier, 2013). The other study that compared women with and without disabilities in Cambodia revealed that women with

disabilities experienced more sexual violence (24.4%) compared with 16.8% women without disabilities (Asbury & Walji, 2013).

In addition to the variation in prevalence rate of GBV among women with and without disabilities, there were also differences among women with different disabilities themselves. For example, the research report by Schröttle and Glammeier (2013) that is indicated in *Table 2* revealed that women living with hearing disability were relatively more prevalent for emotional, physical and sexual violence than women living with visual and physical disabilities.

All these numerical figures clearly depicted that woman with disabilities experience physical, sexual and psychological violence more than women without disabilities. There were also variations in psychological, sexual and physical violence prevalence rate across disability types. The main reasons that aggravate the vulnerability among WWD originated from personal, social, cultural as well as situational factors.

2.5.1 The Extent of GBV against Women with Disabilities in Ethiopia

There are an estimated 7million (10%) of the total populations live with some kind of disability in Ethiopia (Nigest, 2011). Visual impairment accounted for about 42.2% of all disabilities while hearing impairment and disability from leprosy contributed 7.8% and 6.5% respectively. People with disabilities (PWDs) are among the most socially and economically disadvantaged segment of the population. Besides their physical suffering from pain and immobility, these individuals are socially distressed from various forms of stigma and discrimination, dependency and rejection (Nigest, 2011).

Like most developing countries in the world, women with disabilities in Ethiopia are highly vulnerable for GBV due to the intersection of three interwoven factors specifically gender, disability and economic problem. These interwoven factors are clearly observed in Ethiopia that maximizes the rate of GBV on women with disabilities. Even though there is limited research finding in relation to prevalence rate of violence among women with disabilities in Ethiopia, Nigest in her research study reported that 40.5% and 30.8% in life time and in the past 12 month respectively had ported physical violence. The same study also reported out of the total studied women with disabilities, 42.1% during their life time and 57.7% for the past 12 months experienced sexual violence.

However, the finding of this study reported low rates compared with the international studies reported by Hughes et al., (2011), the prevalence rate of any type of inter personal violence among women with disabilities ranged from 26.0%–90.0% for lifetime and 2.0%-70.0% for the past year. Similarly, it was very low compared with the prevalence rate 71% for general population in Ethiopia (García-Moreno et al., 2005).

Habtemariam (2015) in his study reported that men with disabilities were among the perpetrators of violence against women with disabilities in Ethiopian context. The finding showed that many female students in the boarding school dropout of school due to pregnancy from rape committed by men with disabilities during their study at the boarding school of the blind. Regarding reporting their case for the police, Habtemariam (2015) find out that, most of the GBV and specifically rape were not reported because of various reasons such as victims' low level of awareness and a belief that the justice system was not responsive to their needs.

The available few researches depicted women with disabilities as very much exposed for GBV that can threaten their physical, mental and their day to day activities. In Ethiopian context, because of the abundance of the problem, the complex and multifaceted nature of the problem and the value and dignity given for people with disabilities, low attention was given by the concerned bodies including even by scholars. In Ethiopian context most of the activities performed for people with disabilities seem like for charity, not considered as their right. In addition, most of the supporting mechanisms and preventive techniques for GBV also seem unorganized among all the stockholders.

According to Habtemariam (2015) a huge number of people with disabilities including women with disabilities live in streets and are very much vulnerable for GBV. In the capital city Addis Ababa, it is very much common to see women with disabilities while they exposed for street life and begging as a result of economic problems. In addition, for many women with disabilities it is also to sale lottery in the city (Ibid). In Ethiopian, Addis Ababa, jobs that fit people with disabilities are difficult to find, even if they get some they are not given equal opportunity to compete with people without disabilities. They are generally judged by their looks or disability. This leads them to be economically reliant on others that create a condition to be violated by those who provide support. Women with disabilities are at higher risk for violence compared to non- disabled women since they are living with disability. They are unable to protect themselves due to their disability especially with those with limited movement or cognitive disabilities. Family members also may not give care and protection for adolescents' living with disabilities like that of without disabilities.

Most of the time women with disabilities stay home because they may not have jobs to go, or due to their disability type and family pressure, this usually creates a condition to be exposed to GBV especially sexual violence. One FGD participant in Nigists (2011, p, 32) study described her personal experience as follow:

“Sometimes just because you are disabled your family does not want you to go out they just expect you to stay home and do house work. I know families who have a daughter with physical impairment they don’t want her to go out they just want her to work house work they don’t even want her to join or come to the association.”(A2)

The other factor that exposed women with disability for GBV could be unrealistic perpetrators’ perception like considering women with disability as sexually inactive, virgin, and free from sexually transmitted disease like HIV/AIDS (Habtemariam, 2015; Nigist, 2011). One study participant from Nigist (2011, p, 32) study forward her opinion as follow:

“Men perceive that women with disabilities are healthy not sexually active and virgin. They don’t even consider that we may even have HIV or other diseases because they perceive us differently.”(A3)

Generally speaking, GBV among women in general and especially women with disabilities in particular were highly vulnerable for GBV. There were many contributing factors that exposed them for GBV. These factors can extend from personal factors up to complicated societal conditions. As a result of these factors, WWD were highly prevalent than WWOD that can threaten their health especially mental health problem. Contrary this reality, it is very difficult to get research study that focused on the extent of GBV and its multidirectional

consequences mainly among women with disabilities. Thus, this reality promulgates the need of research study like the current study in Ethiopian context to alleviate the problem of women with and without disabilities and to fill the knowledge gap in the area.

2.6 How to Measure GBV against women?

Currently there are many commonly used instruments by researchers to measure violence among women with and without disabilities. One of the most commonly used instruments is the one that was developed by WHO that is used to study health and domestic violence against women in ten countries including Ethiopia. This instrument contains four questions for physical abuse and four questions for sexual abuse and four questions for psychological abuse. To assess the experience of physical abuse, the instrument inquires women whether they were ever slapped, pushed or something thrown at them that could hurt; kicked, dragged, beaten, hit with fist; choked, strangled or burnt on purpose; threatened or hurt by gun, knife, or other weapons. At least one “yes” response among the four items qualifies the respondent for being faced with any form of physical violence.

In addition, the instrument assess sexual violence against women; being physically forced to have sex; having sex because of being afraid to refuse; forced to do something sexual which is degrading or humiliating and sexually harassed (unwelcome touches). All women who experienced the item in question were asked the perceived frequency (once, few times or many times) in the past 12 months and prior to the past one year. At least one “yes” response among the four items qualifies the respondent for being faced with any form of sexual violence (García-Moreno et al., 2005).

The other instrument commonly used by scholars to measure GBV is Abuse Assessment Screen-Disability (AAS-D) (McFarlane et al., 2001) specifically aimed at identifying disability-related abuse: (a) Within the last year, has anybody you depend on refused to help you with an important personal need (related to your basic daily activities), such as taking your medicine, getting to the bathroom, getting out of bed, bathing, getting dressed, or getting food and drink? And (b) within the last year, has anyone prevented you from using any of the technical aids you need in your daily life, such as a wheelchair, cane, respirator, or other assistive devices? Items were responded on a 4-point Likert scale ranging from “not at all” to “yes, continuously”. From these two instruments, the first instrument was selected for the current study because of the comprehensive characteristics for both for women with and without disabilities and its cultural validity for many countries including Ethiopian participants.

2.7 Consequences of GBV

Globally, at least one in three women has experienced some form of GBV during their lifetime (Heise, Ellsberg & Goldberg, 1999). Violence against women is not only a problem of adults or adolescents women rather it occurred in all stages of human development starting from pre-birth, and continues to infancy, childhood, adolescence, reproductive age and elderly periods (Shane & Ellsberg, 2002). Women are reluctant to discuss abuse, and may accept it as part of their fate. These behavior can make less recognized the prevalence of violence against women, millions of girls and women worldwide suffer from GBV and its consequences.

Growing body of research evidence is revealing that violence against women has a profound impact on victims' immediate and long-term health status. Some of these impacts

include physical health, sexual and reproductive health, mental health related problems (Garcia-Moreno et al., 2005; Campbell, 2002). Here under, the mental health consequences of GBV were presented. In the next sub-sections, the association of GBV and its association with mental health were presented.

2.7.1 Mental Health Problems as a Consequence of GBV against Women

According to WHO (2011) mental disorders include common conditions such as depression, anxiety and PTSD and also severe and disabling disorders such as schizophrenia and bipolar disorder. The same report also indicated that when only the disability component is taken into consideration in the calculation of the burden of disease, mental disorders account for 25.3% and 33.5% of all years lived with a disability in low and middle-income countries, respectively(Ibid).

Compared to the number of patients living with mental health problems, almost insignificant of them acquired support and treatments globally. For instance, between 76% and 85% of people with severe mental disorders receive no treatment for their mental health problem in low- and middle-income countries; the corresponding range for high-income countries is also high: between 35% and 50% (WHO, 2011).

Many research findings reported that depression, anxiety, PTSD, phobias, substance abuse, sleep and psychosomatic disorders, eating disorders, self-harm and suicide were the mental health consequences of GBV (Garcia-Moreno et al., 2005; Campbell, 2002; Cascardi, & O'Leary, 1992; Shane & Ellsberg, 2002; & Juli, 2014). In this sub-section, the most common

mental health problems that are incorporated within the objectives of current study were presented.

2.7.1.1 Depression as a Consequence of GBV

According to Nolen-Hoeksema (2004), depression consists of a major depressive episode that must include at least five out of nine symptoms for two weeks or more. The nine depressive symptoms are depressed mood, significant reduced level of interest in most activities, loss or gain weight, insomnia, agitated or slowed down behavior, guilt, inability to concentrate, feeling fatigue and thoughts of death.

Similarly, World Federation for Mental Health (2012) defined depression as a common mental disorder that presents with depressed mood, loss of interest or pleasure, decreased energy, feelings of guilt or low self-worth, disturbed sleep or appetite, and poor concentration. Literature also explained that the symptoms should be intense, prolonged and interfere with the person's daily functioning. This distinct definition can clearly differentiate depression from unhappiness and sadness (Golding, 1999). An individual may possess depressive symptoms but may not necessarily have depression if there are fewer than five depressive symptoms or the symptoms are not intense, prolonged or do not interfere with daily functioning (Nolen-Hoeksema, 2004).

GBV is strongly associated with depression (Golding, 1999; Campbell, Sullivan, & Davidson, 1995; Cascardi & O'Leary, 1992), which is often found in abused women staying with abusive partners. Depression also has persistently been found in abused women after they have separated from abusive partners (Campbell, 2002). The prevalence rate of depression vary widely depending on a number of factors, such as the mental health assessment tool used, the

number of women in the study, and the timing of the assessment (e.g., during a crisis, after a woman is safe) (Warshaw & Barnes, 2003). Across studies among US and Canadian women receiving services for domestic violence, rates of depression ranged from 17% to 72% (Warshaw, & Barnes, 2003). In a meta-analysis of 18 studies, the pooled prevalence of depression among abused women was 48%, which is much higher than the lifetime rate of 18.6% in the general population (Golding, 1999). A research conducted among women who were victims of violence in Italy also revealed that 5% of women were not depressed, 60% had mild depression, 25% moderate depression, and 10% suffer from severe depression (Juli, 2014).

Depression has been predicted to be the second leading contributor to the global burden of disease by the year 2020 (Pollock, Manaseki-Holland, & Patel, 2006). Besides, studies have revealed that depression is associated with higher rates of physical and mental illness, such as headaches, back pain, sexually transmitted diseases, appetite loss, digestive problems, and gynecological problems (Campbell, 2002), loss of consciousness, diminished cognitive abilities, memorization and concentration problems (Valera & Berenbaum, 2003).

The research conducted by Pico-alfonso et al. (2006) was one of the few studies that revealed relatively the complete picture of GBV and its association with mental health among women who experienced and didn't experience physical, sexual, and psychological violence. According to this research report women who experienced GBV use more number of psychiatric treatments, psychological treatment than non-abused women. Besides, women who experienced physical or physical/psychological violence reported higher mean score for Beck's Depression Inventory (BDI) than non-abused women. Regarding, severity of depression symptoms, women

who experienced GBV reported higher score for severe, moderate and mild depression than non-abused women in Spain (Ibid).

The research study conducted in Cambodia by Astbury and Walji (2013) compared the mental health status of women with and without disabilities and who experienced and didn't experience violence by using self-report questionnaire (SRQ). The result revealed a highly significant difference in the mean scores of women with disabilities (13.7, SD=4.5) and those without (11.9, SD=4.6). The mean score for women who reported any violence was 13.57 (SD=4.23) compared with 11.06 (SD=5.39) for women who did not report violence.

As repeatedly observed, the level of GBV was higher among women with disabilities than women without disabilities. Similarly the level of mental health problem also can be higher among women with disabilities than women without disabilities. For instance, a study that compared the psychological and physical sequel of physical and sexual intimate partner violence among women with and without activity limitation reported that women with activity limitation shown relatively higher depression level 54(31.5%) compared with 108(19.8%) women without activity limitation (Forte et al., 2005). This data clearly confirmed that the consequence of GBV created mental health problem among women with disabilities higher than women without disabilities. Women without disabilities who experienced and didn't experience GBV may not equally revealed depression level. A research finding in Africa in Maputo city reported that women who experienced GBV scored higher level of depression than who didn't experience GBV (Zacarias et al., 2012). Thus, both experiencing GBV and living with disability were important variables that determine the level of depression.

Thabet et al.,(2015) a study on domestic violence and mental health assessed depression across age, marital status, type of residence, education, place of residence, number of children, and monthly family income by using Beck Depression Inventory. One way ANOVA was performed in which depression total scores were entered as the dependent variable and socio-demographic variables were entered as independent variables. Women who were single reported more depression than those who were divorced, widowed, or married. No other significant differences were found in depression scores and other socio-demographic variables (Thabet et al., 2015).

Some demographic characteristics of the study participants such as age, economic status, history of victimization and the like can worsen the problem among the victims. For instance, a study that compares WWD across different ages revealed that older participants reported more psychological problems, and physical health problems, higher drug use, lower perceived social support and lower self-esteem (Ferres et al., 2013). The study revealed that age is one factor that determines the outcome of GBV. Furthermore, the finding depicted that GBV has multi-dimensional impact such as psychological health like depression and lowered self-esteem, physical health complication, drug abuse and lower perceived social support on the victims.

To sum up, all the above research findings confirmed the strong association of GBV with depression and related mental health complications. Consequently, the day to day normal functioning of the victims can be affected by the higher level of depression. In addition, there is strong association between need of psychiatric and psychological treatments with experience of

GBV. Finally, women who experienced physical/psychological abuse revealed more severe depression compared with only psychologically abused women. This implies that the mental health status has become worsen for women who experienced repeated violence.

2.7.1.1.1 Prevalence Rate of Depression as a Result of GBV in Ethiopian

In Ethiopia context, depression contributes to about 6.5% of the burden of diseases (Abdulahi, Damen & Dereje, 2001). This can be the highest share of burden compared to other forms of mental disorders. Various factors were reported to be associated with the development of depression in Ethiopian context. Being unmarried, being female, low educational status, low income, living alone, bereavement, illnesses, and substance use were reported attributes of depression which could present variably in different contexts (Girma et al., 2016).

In Ethiopian context, limited research studies are available that focus on violence and mental health among women in general and women with disabilities in particular. The prevalence rate of depression across the available few studies varies depending on the methodology used, the participants involved and the instrument used. For instance, a research conducted in Addis Ababa depicted that the life time prevalence of a depressive episode among women was 7.7% (Kebede & Alem, 1999). A systematic review of studies in Ethiopia on depression among women revealed that a pooled prevalence of five studies, which used CIDI to diagnose depression was 6.8 % (Tesera, 2014). The same review also depicted that the pooled prevalence of depression for the other three studies which used Patient Health Questionnaire (PHQ-9) and Self Report Questionnaire (SRQ) to diagnose depression was 18.3%. Almost comparable research reported in North West Ethiopia by using PHQ-9 with the prevalence rate

of depression was 17.5%, where 10.7% of patients were with mild depression, 4.2% were with moderate depression, 1.9% was with moderately severe depression, and 0.6% had severe depression (Getasew et al., 2016).

A research conducted in southern part of Ethiopia, among female University students depicted that students who experienced any GBV were reported more depressive symptoms than their non-abused counterparts. Abused students reported 31.2% higher than non-abused students (Bizu et al., 2009). On the other hand, a research that studied on intimate partner violence and depression among women in rural Ethiopia using Amharic version of the Composite International Diagnostic Interview (CIDI), reported that the twelve-month prevalence rate of depression was 4.4% (Deyessa, 2010).

Finally, the systematic review reported that when the prevalence rates in three studies that used PHQ-9 and SRQ were pooled together with the five studies that used CIDI, the pooled prevalence of the eight studies were 11% (Tesera, 2014). A study in rural Ethiopia using CIDI revealed that life time and 12 month prevalence of any form of depressive disorder was 8.9 % and 4.4 %, respectively (Gossaye et al., 2003).

These research findings depicted that depression is a prevalent mental health problem which originated as a result of interpersonal violence against women in Ethiopian context. Besides, these research findings also confirmed that the prevalence rate of depression were inconsistent across different participants such as rural, urban women and University students and instruments used like CIDI, PHQ-9 and SRQ. These inconsistent findings in prevalence rate of depression and the availability of limited number of studies in general populations and absence

of any studies among women with disability indicated the strong need of research in the area of violence and mental health problem among women in general and women with disabilities in particular in Ethiopian context.

2.7.1.1.2 Instruments to Measure Depression

Currently there are several inventories/scales developed and used to measure depression. Some of the most common self-report measurements of depression include Beck Depression Inventory (BDI), Center for Epidemiologic Studies of Depression Scale (CES-D) and Patient Health Questionnaire (PHQ-9) (Campbell, 2002).

The Beck Depression Inventory (and its later revisions BDI-1A and BDI-II) is a 21 items consisting of a multiple-choice self-reported inventory developed by Aaron T. Beck, and recognized as one of the most widely used psychometric tests for measuring the various levels of depression, from mild to severe (Craven, Rodin, Littlefield, 1988). He defined depression as the self-conception of worthless, outer world meaninglessness, and future hopelessness. These self-concepts are what can be observed in a person experiencing depression because of an irreversible loss or disappointment which is very significant in their life (Beck, 1971). In 1996, the BDI was revised as BDI-II to reflect changes in the DSM-IV. The BDI-II is a 21-item questionnaire addressing the severity of depressive symptoms in the past week.

Each item scores in the range 0 (symptom not presents) to 3 (symptom strongly presents), giving a total score from 0 to 63. The higher the total score, the more severe the depression is. It can be further categorized to define the level of depression. An individual is considered to be at a minimal depression level when their total score is between 0 and 13, mildly depressed with a

score between 14 and 19, moderately depressed with a total score between 20 and 28, and severely depressed with a total score between 29 and 63 (Olsson & Knorrning, 1997).

The Center for Epidemiologic Studies of Depression Scale (CES-D) is the other commonly used scale to measure depression. This scale comprises 20 items covering the most common depressive symptoms in the general population (Newcomb & Carmona, 2004). The items were selected based on previously validated depression scales. It includes the components of depressed mood, feelings of worthlessness, feelings of helplessness and hopelessness, loss of appetite and sleep disturbance. Similar to the BDI, the recall period is also one week. However, CES-D does not include some of the items the BDI does, including feelings of guilt, psychomotor retardation and suicidal thoughts. Each CES-D item is rated on a 4-point scale, ranging from 0 (rarely or none of the time) to 3 (most all of the time). The plausible range of score is 0 to 60, with higher scores indicating higher depression severity. A CES-D score ≥ 16 indicates the presence of depression but no further categorization by severity is available (Björgvinsson et al., 2013). The CES-D has been widely used in all age groups and in both health care and community settings. It has been developed and translated into many different languages and is free for non-profit use (Newcomb & Carmona, 2004).

The next, commonly used depression measuring scale is Patient Health Questionnaire (PHQ-9). According to Spitzer, Kroenke and Williams (1999) this self-administered questionnaire was developed for the purpose of measuring depression in primary care setting. It is a multi-purpose questionnaire for diagnosing and measuring the severity of depression. It incorporates the DSM-IV depression diagnostic criteria (Rohde et al., 2008). It consists of 9 items, covering nine depressive symptoms. They are depressed mood, significant reduced level

of interest in most activities, loss of appetite, insomnia, agitated or slowed down behavior, guilt, poor concentration, feeling fatigue and thoughts of death. For each item, both the frequency of the symptoms experienced, and how difficult the problem makes the person's life are rated on a 4-point scale ranging from 0 (not at all) to 3 (nearly every day). The scoring system allows the classification of depression severity where 1 – 4 = minimal depression, 5 – 9 = mild depression, 10 – 14 = moderate depression, 15 – 19 = moderately severe depression and 20 – 27 = severe depression (Spitzer, Kroenke & Williams, 1999). From these three instruments, PHQ-9 was selected for the current research because it is easily manageable and can be used for multipurpose for both diagnosing and measuring the severity of depression.

2.7.1.2 PTSD as a Consequence of GBV

PTSD is a syndrome experienced by people who have survived traumatic events such as violence and vehicle accident. According to American Psychiatric Association (1994) PTSD is a syndrome of intrusive re-experiencing, avoidance and emotional numbing, and hyper-arousal symptoms that occurs in some individuals in the aftermath of a traumatic event. A traumatic event is defined as experiencing or witnessing an event involving threat to life or physical integrity that results in feelings of fear, helplessness, or horror. Almost in a similar way Nolen-Hoeksema (2004), also define PTSD as an experiencing the traumatic event, emotional numbing and detachment and hyper vigilance and chronic arousal as the symptoms of PTSD.

Many research findings reported that there is strong positive correlation between GBV and PTSD. Various research reports revealed that PTSD is one of the most frequently observed

consequences of violence against women (Warshaw & Barnes, 2003; Campbell, Sullivan & Davidson, 1995; Cascardi, & O'Leary, 1992; Golding, 1999).

Regarding the prevalence rate of PTSD among abused women, there is variations depending on a number of factors, such as the mental health assessment tool used, the number of women in the study and the time of the assessment like during a crisis, after a woman is safe (Warshaw & Barnes, 2003). Cascardi and colleagues reviewed a number of studies on abused women finding that the rate of PTSD ranged from 31 to 84%, with modal rates ranging between 45 and 60% (Cascardi, O'Leary & Schlee, 1999).

A meta-analysis of researches on violence and mental health among battered women revealed that the prevalence of mental health problems among women with a history of intimate partner violence, finding the weighted mean prevalence of 63.8% in 11 studies of PTSD (Golding, 1999, p. 99). Other meta-analysis of a sample studies from the years 1987–1993 also found that PTSD symptoms have ranged from 33% to 86% among sexually abused victims across studies (Polusny & Follette, 1995).

Other studies examining PTSD in battered women have identified a strong, positive correlation between severity of abuse and intensity of PTSD symptomatology (Golding, 1999). Moreover, among abused women PTSD symptoms can last long after the end of the abusive relationship (Combelle, 2002). Brownridge (2006) in his study reported that psychological abuse frequently coexists with physical abuse by the intimate partner. Psychological abuse often includes threats to physical and psychological health, isolation of the victim and attempts to induce humiliation (Ibid). Another study also underlines that psychological abuse has a unique

and sometimes even greater impact than physical abuse on women's psychological functioning, particularly within the areas of depression and PTSD (Cambell, 2002).

One of the unique natures of PTSD is that the effect of a given traumatic experience can exist throughout the life span of the victim. A research finding revealed that childhood violence experiences have direct relation with current level of post traumatic experiences among battered women. For instance, in a community sample of 391 adult females, 64% of them who were raped before 18 years and 33% of the victims who were molested before 18 years had PTSD. Additionally, 11% of those who experienced noncontact sexual abuse had PTSD (Saunders et al., 1992).

A research among women, who were non-abused, physically/psychologically abused and psychologically abused by their intimate partners and the associations with mental health problem were reported in Spain (Pico-alfonso et al., 2006, p.605). The same research also reported that women who were physically/psychologically abused women 28.0% ($M=14.7$, $SD = 12.1$) and psychologically abused women 34.5% ($M=14.2$, $SD= 10.1$) revealed relatively higher mean score compared with non-abused women 0 ($M=2.1$, $SD= 3.0$) for the severity of PTSD (Ibid). This study confirmed that GBV is highly correlated with PTSD.

Regarding the result of the three sub-scales of PTSD, re-experiencing, avoidance and arousal, women who were physically/psychologically abused and psychologically abused women by their intimate partners were reported higher score than non-abused women (Pico-alfonso et al., 2006, p.605). Further, women who were physically/psychologically abused and

psychologically abused women by their intimate partners were reported to have higher mean score for suicidal thoughts suicidal attempt than none abused women.

Generally speaking, the rate of GBV and PTSD in developing world mainly in Africa is hardly available. Most of the studies related to PTSD related to refugees life, accidents, unexpected death of loved one and war events. One research in South Africa reported that physical violence and sexual violence accounts for 37.6% and 7.6% of the total problem of PTSD respectively (Atwoli et al., 2013). Like other African countries, researches that investigated the association of GBV with the level of PTSD in Ethiopia were negligible. However, a study conducted among 41 female adolescents between 12-18 years of age in Ethiopia revealed that 61% of the participants meet the criteria for PTSD (Sonan, 2015).

As mentioned earlier, because of lack of research findings that revealed the association of GBV with PTSD, it becomes difficult to clearly express the extent of GBV on mental health between women with disabilities and without disabilities in Addis Ababa. However, as indicated before research studies from developed countries confirmed that there was strong association between GBV and high level of PTSD.

Research findings reported that there are a number of factors that are aggravating the likelihood of women who experienced GBV for PTSD. First, PTSD from childhood abuse is known to increase the risk of frequent victimization in adulthood (Messman-Moore, Long & Siegfried, 2000; Sandberg, Matorin & Lynn, 1999). Victimization during childhood also appears to increase the likelihood that negative mental health consequences will emerge if a woman is offended by a partner. Another research conducted by Lewis and colleagues found that childhood

emotional abuse mediates the relationship between childhood exposure to family violence and PTSD which results from adult interpersonal violence victimization (Lewis et al., 2006).

The other factor that aggravates the level of PTSD among victims could be the nature of the abusive behavior itself. For example, sexual abuse often occurs in combination with other types of interpersonal violence and, when it does, raises risk for PTSD and other serious mental health impacts. Partner rape has been associated with PTSD (Weaver et al., 2007). Sexual assault by a partner was the stronger predictor of PTSD (Temple et al., 2007) and sexual aggression by a partner is a stronger predictor of negative mental health outcomes than is physical abuse (Taft et al., 2007).

The other factor determining the level of PTSD among women who experienced GBV was the physical condition or physical state of the victim. According to Dutton et al. (2006) a history of exposure to GBV as well as interpersonal violence during pregnancy was negatively correlated to women's mental health symptoms across diagnostic categories. The number of partners and the timing of this exposure had different effects. Those experiencing chronic GBV had the worst consequences. Women who experienced GBV recently during their pregnancies and in the year prior to pregnancy with their current partners had the next worst outcomes. In other research, current GBV predicted PTSD symptoms (especially avoidance), with psychological abuse contributing variance over and above physical abuse (Lewis et al., 2006). Different demographic characteristics of the participants can also determine the level of PTSD among the women who experienced GBV. For instance, review of studies indicated that number of children, age of the women, family income or employment and availability of social support

(Hughes, & Jones, 2000). That means women who have more number of children, older, relatively living in poor economic status, and lack social support can increase the level of mental health problems.

Thabet et al., (2015) in their study on domestic violence and mental health assessed PTSD across age, marital status, type of residence, education and monthly family income. They assessed PTSD by using Posttraumatic Stress Disorder Checklist. One way ANOVA result reported that women who were single, divorced, or widowed had higher PTSD scores than women who were married ($F=6.9$, $p = 0.001$) (Thabet et al., 2015). The same study also revealed that women living in cities had higher PTSD scores than those living in camps or villages ($F=5.66$, $p= 0.004$). However, the study reported that there were no significant differences in levels of PTSD between groups according to monthly family income or educational level of women.

With respect to victims' age, a study has found that older survivors experience increased depression and general trauma (Frank & Stewart, 1984) however, younger age has been found to predict PTSD and depression (Elliott et al., 2004) and older victims have been found to have fewer PTSD symptoms when assaulted by relatives (Ullman et al., 2006).

Generally speaking, there is a gap to be bridged of research findings in the area of GBV and its association with mental health problem, specifically PTSD between women with and without disabilities in the developing world including in Ethiopia. However the available research findings from western countries revealed that there was significant correlation between GBV and PTSD. In addition, childhood victimization, GBV during pregnancy and the nature of

the abusive behavior itself were some of the common aggravating factors that determine the level of PTSD among women with and without disabilities.

2.7.1.2.1 Measures of PTSD

There are several instruments that are developed to measure the level of PTSD for women who experienced the problem of traumatic events. Some of the most common scales are Minnesota Multiphasic Personality Inventory PTSD scale (MMPI-PTSD) and PTSD Checklist (PCL). One of the greatest advantages of the MMPI-PTSD scale is that it is widely available to clinicians who regularly administer the MMPI-2 as part of their day to day activities. The first version of MMP1-PTSD was a 49 item measure derived from the MMPI. When the MMPI was revised, the MMPI-PTSD scale underwent some modification. The new version has 46 items and answered in a true-false format. The embedded and stand-alone versions have been shown to be highly correlated ($r=.90$) (Herman, Weathers, Litz & Keane, 1996).

Regarding the administration process, it takes 15 minutes to the stand-alone version of the MMPI-PTSD scale. A total score is derived by summing the positive answers to the items. A cutoff score of 30 was originally suggested for detecting PTSD among veterans; later studies with the MMPI-2 version suggested a cutoff between 24 and 28. The civilian cutoff is in the range of 15 to 19(Koretzky & Peck, 1990).

On the original MMPI-PTSD scale, veterans with PTSD have a mean score between 26 and 37 (Koretzky & Peck, 1990), whereas psychiatric controls have a mean of 20 and non-PTSD patients a mean of 12.30 (Koretzky & Peck, 1990). The internal consistency of the embedded

and stand-alone versions of the MMPI-2 PTSD scale has been shown to be excellent in a veteran sample (range from .95 to .96 (Herman et al., 1996).

The other important instrument that measures traumatic event is PTSD Checklist (PCL). It is a 17-item inventory that assesses the specific symptoms of PTSD. The respondent is asked to rate how much the problem described in each statement has bothered him or her over the past month on a five-point scale ranging from 1 (not at all) to 5 (extremely). The authors have also suggested that the time frame (for example last week) can be changed to accommodate the goals of the assessment.

Regarding scoring and interpretation of scores, in a sample of combat veterans, those with a diagnosis of PTSD obtained a mean of 63.58 (SD = 14.14) and those without a diagnosis of PTSD obtained a mean of 34.40 (SD = 14.09 (Weathers et al., 1993). Sexual assault victims diagnosed with PTSD scored 55 (SD = 16.7) versus 22.8 (SD = 11.8) for the no-PTSD assault group (Blanchard et al., 1996). Concerning the reliability of PCL, it has been shown to have excellent internal consistency in Vietnam and Persian Gulf veterans, victims of motor vehicle accidents, and sexual assault survivors ranging from 0.94 to 0.97 (Blanchard et al., 1996; Weathers et al., 1993). Test-retest reliability over 2 to 3 days was .96 for the Vietnam veterans (Weathers et al., 1993). This instrument was employed for this study because of its good reliability and validity results for women who experienced GBV specifically for sexual violence victims.

2.7.1.3 Anxiety

Another mental health problem that has been suggested in the literature with a higher rate in female victims of GBV is anxiety disorder. Anxiety is a condition of an individual which includes physiological/somatic symptoms (for instance, muscle tension, heart palpitation, stomach pain and the need to urinate), emotional symptoms (a sense of fearfulness and watchfulness), cognitive symptoms (unrealistic worries that something bad is happening) and behavioral symptoms such as avoidance from common activities (Nolen-Hoeksema, 2004). It is in short physiological, emotional, cognitive and behavioral responses an individual produces for a given threatening environmental stimuli like physical and sexual violence.

Research studies depicted that women who experienced GBV met the criteria for anxiety disorder. For instance, Ullman and Siegel (1993) reported that most sexual assault victims (73%-82%) develop anxiety and 12% to 40% of the victims experienced generalized anxiety. A research conducted in Australia on the life time prevalence of violence and mental health also indicated that 77.3 % of the women developed anxiety disorder and 47.1% substance disorder (Rees et al., 2011).

The other research also strengthened the association between violence and high level of anxiety. A research study among randomly selected Palestinian women confirmed that out of 622 abused women, 25.9% experienced moderate anxiety, 17.4% severe anxiety, and 29.9% very severe anxiety (Thabet et al., 2015). Research findings also confirmed that battered women develop high level of anxiety and fearfulness (Scott-Gilba, Minne, & Mezey, 1995; Warshaw & Barnes, 2003 & Campbell, 2002). Such conditions can negatively affect victims' normal mental

health status. These findings confirmed the strong correlation between GBV and anxiety level among the victims.

All elements of GBV may not have equal impact on the victims' anxiety level. Consequently, physical and sexual violence specifically rape may create higher level of fear than other types of violence. For example, Meekers et al., (2013) on their study on the impact of physical violence on mental health problem, reported that 53.5% of the victims had feelings of fear without apparent reason and 66.6% scared easily. In a study by Bonomi et al. (2007), having anxiety were positively related to the type of physical attack ranging from 2.2 in the case of pushing and shoving to 8.1 in the case of cutting and bruising. Similarly, "worry" as a symptom of anxiety was reported by victims in the study of Wingood et al. (2000) with a higher rate in comparison to non-victims. Therefore, the way how violence was committed can determine the level of anxiety that the victims experience. Besides, the availability of psychosocial support system, the way violence committed and related conditions may also have impact on anxiety level of the victims.

A research among women who were non-abused, physically/psychologically abused and psychologically abused by their intimate partners in Spain by Pico-alfonso et al. (2006, p.605) was one of the comprehensive research reports in the area of GBV and mental health problem. The research reported that women who experienced physically/psychologically abused ($M=54.2$, $SD= 34.1$) and psychologically abused ($M=47.7$, $SD= 5.8$) higher anxiety compared with non-abused women ($M=17.7$, $SD= 18.2$) for Spielberger's STAI. This finding implies that women who experienced GBV were highly exposed for the mental health specifically for anxiety compared with non- abused women.

Research study that focused on GBV and its association with the level of anxiety between women with and without disabilities was hardly available. Consequently, very much limited studies were available. Out of these limited studies, a research conducted in Cambodia revealed that women with disabilities who experienced GBV were more likely than those without disabilities to sleep badly, feel frightened, have trouble thinking clearly, cry more than usual, feel their work was suffering, feel like a worthless person, feel tired all the time, to think about ending their life (Astbury & Walji, 2013).

The other study that compared the psychological and physical sequel of physical and sexual intimate partner violence among women with and without activity limitation reported that women with activity limitation shown high anxiety level 54(31.5%), fearful(43.0%) compared with 108(19.8%) and 180(33%) women without activity limitation respectively (Forte et al., 2005). The same study also reported that 84(39.8%) women with activity limitation used medication for anxiety compared with 87(12.6%) women without activity limitation. These data clearly confirmed that the consequence of GBV created mental health problem among women with disabilities higher than women without disabilities (Ibid). These data confirmed that women with disabilities experienced mental health problem specifically anxiety more severely than women without disability even both experienced GBV.

A research conducted in Butajira, Southern Ethiopia, on women's health and life events reported that the twelve month prevalence of anxiety disorder was higher among women who experienced moderate physical violence and severe physical violence than women who were never physically violated (Gossaye et al., 2003). Regarding depression across demographic characteristics Thabet et al., (2015) assessed anxiety across age, marital status, type of residence,

education, place of residence, number of children, and monthly family income by using Taylor Manifestation Anxiety Scale. A One way ANOVA test was performed in which each of the demographic variables were entered as independent variables with the mean scores for anxiety as dependent variables. Women who were single were more anxious than women who were married ($F= 5.4, p = 0.001$). No statistical significant difference was reported for anxiety score between type of residence, educational level and monthly income (Thabet et al., 2015).

Nonetheless, research study that focused on the association of GBV with anxiety among women with disabilities was not available in Ethiopian context. However, all the above obtained researches finding confirmed that anxiety was one of the most common mental health problems among women who experienced GBV.

2.7.1.3.1 Measure of anxiety

Currently, there are various measures of anxiety. Even though it is not the intention of this section to review all the scales that measure anxiety, let us briefly assess three of the most common ones specifically, Hamilton Anxiety Rating Scale (HAM-A), Beck Anxiety Inventory (BAI) and State-Trait Anxiety Inventory (STAI).

Hamilton Anxiety Rating Scale (HAM-A) - is one of the first rating scales developed to measure the severity of anxiety symptoms, and is still widely used in both clinical and research settings (Hamilton, 1959). The scale consists of 14 items, each defined by a series of symptoms, and measures both psychic anxiety (mental agitation and psychological distress) and somatic anxiety (physical complaints related to anxiety). Although the HAM-A remains widely used as an outcome measure in clinical trials, it has been criticized for its sometimes poor ability to

discriminate between anxiolytic and antidepressant effects, and somatic anxiety versus somatic side effects (Maier, Buller, Philipp & Heuser, 1988). The HAM-A does not provide any standardized probe questions. Despite this, the reported levels of interpreter reliability for the scale appear to be acceptable. Each item is scored on a scale of 0 (not present) to 4 (severe), with a total score range of 0–56, where <17 indicates mild severity, 18–24 mild to moderate severity and 25–30 moderate to severe (Ibid).

Beck Anxiety Inventory (BAI) is a brief measure of anxiety with a focus on somatic symptoms of anxiety that was developed as a measure adept of discriminating between anxiety and depression (Beck et al., 1988). According to Julian (2014) the BAI has a total of 21 items and administered via self-report and includes assessment of symptoms such as nervousness, dizziness, inability to relax, etc. Regarding response options/scale respondents indicate how much they have been bothered by each symptom over the past week. Responses are rated on a 4-point Likert scale and range from 0 (not at all) to 3 (severely) (Ibid). Regarding scoring and interpretation, scoring is easily accomplished by summing scores for items. The total score ranges from 0–63. In relation to interpretation of scores, 0–9, normal or no anxiety; 10–18, mild to moderate anxiety; 19–29, moderate to severe anxiety; and 30–63, severe anxiety (Beck et al., 1988).

Internal consistency of the scale is high with Cronbach's alphas ranging from 0.90 to 0.94 and has been tested in large samples of psychiatric patients, college students, and community-dwelling adults (Julian, 2014). Test–retest coefficients are reasonable and range from 0.62 (7-week interval) to 0.93 (1-week interval).

Regarding the limitation, BAI was developed in an attempt to reduce overlap with depressive symptoms, and as a result tends to focus more exclusively on somatic (e.g., heart racing, dizziness) symptoms. In medical conditions, these symptoms have the propensity to overlap with some physical aspects of medical conditions and, therefore, cautious interpretation would be warranted (Julian, 2014). The BAI does not assess other primary symptoms of anxiety, most notably worry and other cognitive aspects of anxiety (Ibid).

The Spielberger State-Trait Anxiety Inventory (STAI) is the other most frequently used measures of anxiety in applied psychology researches. It is a reliable and sensitive measure of anxiety. The inventory contained a total of forty items. Items 1 - 20 measure situational or state anxiety (STAI-S), and items 21 - 40 measure underlying or trait anxiety (STAI-T). Regarding responses, for the S-Anxiety scale assess intensity of current feelings “at this moment”: 1) not at all, 2) somewhat, 3) moderately so, and 4) very much so. Responses for the T-Anxiety scale assess frequency of feelings “in general”: 1) almost never, 2) sometimes, 3) often, and 4) almost always (Julian, 2014). In relation to scoring, item scores are added to obtain subtest total scores. Scoring should be reversed for anxiety-absent items (19 items of the total 40).

Regarding score interpretation-range of scores for each subtest is 20–80, the higher score indicating greater anxiety. A cut point of 39–40 has been suggested to detect clinically significant symptoms for the S-Anxiety scale (Julian, 2014); however, other studies have suggested a higher cut score of 54–55 for older adults (Kvaal et al., 2005). According to Julian, (2014) the limitations are there exists relatively poor validity of the scale, particularly the T-Anxiety subscale for differentiation anxious from depressed states. Further, because the intent of

the T-Anxiety scale is to characterize a longstanding trait, clinicians and researchers should be mindful of this if seeking scales to detect change over a relatively short period of time (Ibid).

2.7.1.4 Self-esteem

The term self-esteem is derived from a Greek word meaning “reverence for self.” The "self" part of self-esteem indicates to the values, beliefs and attitudes that a person holds about him or herself. The "esteem" part of self-esteem shows the value and worth that one gives to oneself (Deshpande & Chhabriya, 2013). With this notion, self-esteem is considered as self-evaluation, or an evaluation of one’s self-worth and self-acceptance (Cheng & Furnham, 2003). Similarly, according to Deshpande and Chhabriya, (2013), self-esteem is the total set of evaluative attitudes about one's worth as a person in a variety of circumstances. The same authors also explained that, self-esteem was considered as one’s self-confidence and self-regarding attitudes. In addition, almost in similar fashion Rosenberg (1965, p. 30-31) defined self-esteem as:

A positive or negative attitude toward a particular object, namely, the self...High self-esteem, as reflected in our scale items, expresses the feeling that one is good enough. The individual simply feels that he is a person of worth; he respects himself for what he is, but does not stand in awe of himself nor does he expect others to stand in awe of him, and he does not necessarily consider himself superior to others.

Cooper Smith (1967, p. 4-5) in his definition of self-esteem suggests that it is important to a person’s identity and awareness.

By self-esteem we refer to the evaluation which the individual makes and customarily maintains with regard to himself; it expresses an attitude of approval or disapproval, and indicates the extent to which the individual believes himself to be capable, significant, successful, and worthy. In short, self-esteem is a personal judgment of worthiness that is expressed in the attitudes the individual holds towards himself; it is a subjective experience which the individual conveys to others by verbal reports and other overt expressive behavior.

Mussen, Conger, Kagan, and Huston (1984) differentiate self-esteem from self-concept in that self-concept is a set of ideas about oneself that is descriptive rather than judgmental, whereas self-esteem is one's evaluation of one's own qualities. Researchers like Bee (1992) and Santrock (1994), also agreed that self-esteem is the evaluative aspect of self-concept. Some authors have made an attempt to describe the types and components of self-esteem. For example, Simpson and Boyle (1975) described two types of self-esteem: global self-esteem (resulting from a general evaluation) and specific self-esteem (related to competence in a particular activity). In line with this, Gecas and Schwalbe (1983) classified self-esteem into two components: competence and worth. The competence component (efficacy based self-esteem) denotes the degree to which people see themselves as capable and efficacious, whereas the worth component (worth based self-esteem) refers to the degree to which individuals feel about themselves as they are persons of value. Generally, Harter (1999) explained that better self-esteem comes from individuals' self-competence and worth in the things they value, while poor self-esteem is the outcome of negative judgments when individuals focus on their weaknesses.

2.7.1.4.1 Living with Disability and Self-esteem

Regarding disability and self-esteem, living with disabilities by itself can be one important factor for developing low self-esteem for people with disability in general. Because of different factors like the negative attitude of the community, living with one kind of disability and its associated negative impacts like dependency on other people to full-fill their basic needs they may develop low self-esteem and distorted perception about themselves than people without disabilities. For instance, a study conducted in US, by Noseka, et al. (2003) among women with physical disabilities and without disabilities reported that women with disabilities had significantly lower self-cognition and self-esteem, and greater social isolation than the women without disabilities, as well as significantly less education, more over protection during childhood, poorer quality of intimate relationships, and lower rates of salaried employment. This implies that in addition to GBV, women with disabilities self-esteem can be threatened by many other factors that directly or indirectly related with their disability status.

2.7.1.4.2 Self-esteem and Mental Health

Literature revealed that self-esteem has positive/negative impact on the normal mental health status of an individual. Positive self-esteem is not only seen as a basic feature of mental health, but also as a protective factor that contributes to better health and positive social behavior through its role as a buffer against the impact of negative influences. It is seen to actively promote healthy functioning as reflected in life aspects such as achievement, success, satisfaction, and the ability to cope with diseases like cancer and heart disease. Conversely, an

unstable self-concept and poor self-esteem can play a critical role in the development of an array of mental disorders and social problems (Mann, Hosman, Schaalma, & Vries, 2004).

Self-esteem plays a significant role in the development of a variety of mental disorders. According to the Diagnostic and Statistical Manual of Mental Disorders (DSM IV), negative or unstable self-perceptions are key components in the diagnostic criteria of major depressive disorders, manic and hypomanic episodes, dysthymic disorders, dissociative disorders, anorexia nervosa, bulimia nervosa, and in personality disorders, such as borderline, narcissistic and avoidant behavior (American Psychiatric Association, 1994). Negative self-esteem is also found to be a risk factor, leading to maladjustment and even escapism. Lacking trust in themselves, individuals become unable to handle daily problems which, in turn, reduces the ability to achieve maximum potential (Mann, Hosman, Schaalma, & Vries, 2004). This could lead to an alarming deterioration in physical and mental well-being. A decline in mental health could result in internalizing problem behavior such as depression, anxiety and eating disorders. The outcomes of low self-esteem for these disorders are elaborated below.

Different clinical literatures suggest that low self-esteem is related to depressed moods, depressive disorders, hopelessness, suicidal tendencies and attempted suicide (Mann, Hosman, Schaalma, & Vries, 2004). Correlational studies have consistently shown a significant negative relationship between self-esteem and depression (Patton, 1991). Campbell, Chew and Scrathley, (1991) found that individual appraisal of events to be clearly related to their self-esteem. Low self-esteem subjects rated their daily events as less positive and negative life events as being more personally important than high self-esteem subjects. Individuals with high self-

esteem made more stable and global internal attributions for positive events than for negative events, leading to the reinforcement of their positive self-image. Subjects low in self-esteem, however, were more likely to associate negative events to stable and global internal attributions, and positive events to external factors and luck (Mann et al., 2004). There is a growing body of evidence that individuals with low self-esteem more often report a depressed state, and that there is a link between dimensions of attribution style, self-esteem and depression (Hammen & Goodman-Brown, 1990).

Although low self-esteem is most frequently associated with depression, a relationship has also been found with other internalizing disorders such as anxiety and eating disorders. Research findings indicated that self-esteem is inversely correlated with anxiety and other signs of psychological and physical distress (Beck et al., 2001). Generally speaking, self-esteem is considered as an influential factor both in physical and mental health, and therefore should be an important focus in health promotion; in particular, mental health promotion.

2.7.1.4.3 Violence and Self-esteem among Battered Women

GBV against women has been linked to chronic health, emotional and social complications, one of which includes low self-esteem. For instance, a study comparing chronically battered women and formerly abused women found that women who were still involved in a battering relationship had lower self-esteem on average than formerly abused women (Frisch & MacKenzie, 1991).

According to Papadakaki et al. (2009) low self-esteem can cause women to doubt themselves; this can promote maintaining relations with the abuser. High self-esteem may

prevent a woman from experiencing long term depressive effects of abuse, which is identified as a lasting issue that often results from partner violence. In addition, studies indicated that frequency and severity of physical and/or psychological and sexual violence have inverse relation with women's self-esteem (Lynch & Graham-Bermann, 2004).

Social and cultural discrimination and stereotypic attitude of the society may be internalized by women, translating into self-devaluation, poor self-esteem and body image (Hassouneh-Phillips & McNeff, 2005), and feelings of blame related to the abuse (Plummer & Findley, 2012). Women, who fear of rejection and being alone, force them to stay in an abusive relationship. Once in a relationship, Oktay and Tompkins (2004) found that women with disabilities were more likely to tolerate abuse from their partners rather than living and be single. Women with disability may require the support of other people even to get their basic needs.

Consequently, they may force to tolerate the abuse they face from partners or family members. For instance, a research finding indicated that women living with disabilities experience abuse for extended periods of time compared to those without disabilities (Nosek et al., 2001). Another study in Spain between two types of women with disabilities (Abused vs. Non-abused) identified specific impacts of violence, distinguishing them from those attributable to the disability itself: problems regarding psychological health, psychological well-being, self-esteem and social isolation (Ferres, et al., 2013). The same study also compared the self-esteem mean score of the two groups that is abused and non-abused women. The finding revealed that abused women $M=2.10$, $SD=.46$ compared with non-abused women $M=1.87$ $SD=.42$. These findings confirmed that abused women self-esteem was threatened by the effect of abuse.

According to Itzhaky and Porat (2005), women who leave their abusive partners are usually overwhelmed by feeling a lack of social support and failure to recognize their own abilities. This eventually leads the women to return to the abusive environment for emotional/financial security (Itzhaky & Porat, 2005). According to Cascardi, and O'Leary (1992) self-esteem were highly correlated with the frequency, severity and consequences of physical aggression. The same study also confirmed that when the level of battering increased across the sample, self-esteem was decreased.

Regarding the association between self-esteems and depression, self-esteem and depression are typically associated with one another, but Cascardi and O'Leary (1992) found that self-esteem was much more highly related to abuse than was depressive symptomatology. Each variable shared some unique variance with violence. The same authors suggested that self-esteem may be a more stable construct and depressive symptoms may vary relatively frequently over time (Cascardi & O'Leary, 1992).

Even though, there exists limited researches that revealed the association of GBV and women self-esteem, the existing studies confirmed that there was strong relation between these two variables. Besides, to gender as well as disability related discrimination, physical, sexual and psychological violence from the partners/husbands or strangers can diminish the value women with and without disabilities have about themselves. Both living with disability and the rate of GBV can be contributing factors that lowered the level of women's' self-esteem. For instance, a study that compare the psychological and physical sequel of physical and sexual intimate partner violence among women with and without activity limitation reported that women with activity

limitation shown lowered self-esteem level 60(35.2%) compared with 115(21.1%) women without activity limitation (Forte et al., 2005). This implies that women with disabilities who experienced GBV revealed lowered self-esteem compared with women without disabilities even who experienced that same problem. This data confirmed that women's self-esteem can be threatened by many factors including the rate of experiencing GBV and living with disability. It is obvious that women living with visual disability may not have equal self-esteem to protect themselves from the act of perpetrators' compared with women living without disabilities.

2.7.1.4.4 Self-esteem among Battered Women in Ethiopian Context

In Ethiopian context women with and without disability self-esteem can be threatened by different social related factor mainly by GBV. The available research findings reported that women's self-esteem highly treated by domestic violence. For instance a study on domestic violence and self-esteem in Addis Ababa reported that out of 234 study participants 146 (62.4%) were shown low self-esteem (Abraham, 2015). The same study also reported that there was statistically significant mean differences between abused and non-abused women regarding self-esteem ($t(232) = -5.55, p < 0.05$). This implies that statistically significant variation was observed among battered and non-battered participant regarding self-esteem. The same study also reported correlation coefficient between self-esteem and psychological violence, physical violence and sexual violence, -.349, -.333 and -.308 respectively. This finding confirmed that self-esteem had inverse relationship among the three violence. This means that when the intensity of types of abuse increase, battered women' state of self-esteem decreases (Abraham, 2015).

The demographic characteristics of women who experienced GBV can be the factors that determining the level of their self-esteem. For example, economically empowered women may not be equally vulnerable for the effect of GBV that results low self-esteem. A study in Ethiopian context revealed statistically significant self-esteem variation observed across age, educational level, occupational status (Abraham, 2015). The same study also confirmed that income was a significant contributor for the variation of women's self-esteem. Besides, emotional abuse was found the most significant predictor of self-esteem.

On the other hand, women with disabilities self-esteem is threatened by their disability related personal conditions. For instance, because of prejudice and stereotypic attitude of the society towards disability, people living with disability may not be valued equally like that of people without disabilities. These devalued and stereotypic attitudes of the society can negatively affect the normal development of their self-esteem. When these conditions were on women and living with disabilities that experienced violence, victim's self-esteem becomes highly threatened.

Generally speaking, women in general and women with disabilities in particular who experienced GBV may have developed lower self-esteem as a consequences of both economic vulnerability as well as their experiences of different domestic and interpersonal violence.

2.7.1.4.5 Measures of self-Esteem

There are many measures of self-esteem and some of the most popular ones include Rosenberg Self-Esteem Scale, State Self-Esteem Scale, and Janis–Field Feelings of Inadequacy. In this sub-section the two most widely used scales were discussed.

The State Self-Esteem Scale was developed by Heatherton and Polivy to measure temporary changes in self-esteem (Heatherton & Polivy, 1991). State Self-Esteem Scale is 20-item scale that measures a participant's self-esteem at a given point in time. This scale has high internal consistency (Cronbach's $\alpha=.92$). The 20 items are subdivided into 3 components of self-esteem :(1) performance self-esteem, social self-esteem, and appearance self-esteem. All items are answered using a 5-point scale (1= not at all, 2= a little bit, 3= somewhat, 4= very much, 5= extremely). For example items from social self-esteem measures the extent to which people feel self-conscious, foolish, or embarrassed about their public image (Ibid). The participants' rated to what extent they "felt right" according to seven items for example an item requests "I am worried about what other people think of me".

Rosenberg Self-Esteem Scale (RSE) - is the most widely used measure of global self-esteem (Gray-Little, Williams, & Hancock, 1997). A 10-item scales that measures global self-worth by measuring both positive and negative feelings about the self. All items are answered using a 4-point scale format ranging from strongly agree to strongly disagree. The RSE has high internal reliability ($\alpha 0.92$). Unfortunately, those questions that were worded in a negative direction loaded on the "negative" factor and those that were worded in a positive manner loaded most heavily on the "positive" factor, thereby suggesting a response set. This instrument was used for the current study because of its sound psychometric property and is relatively easy to administer and score.

2.8 Theoretical framework of the study

The diversity of women with and without disabilities' situations and potential variables affecting their likelihood of violence and its consequences impede the development of a single

theoretical explanation to account for their problems in relation to violence. Many researchers have recognized that there is no single cause of violence against women, and efforts to prevent violence must take into account personal, situational and socio-cultural factors (Heise, Ellsberg & Goldberg, 1999). Instead, the state of the art is to recognize an array of potential reasons for an increased risk for violence against women with and without disabilities and to organize them based on where they fit within an ecological context (Petersilia, 2001).

The Bronfenbrenner's (1995) ecological theory of human development has conceptual foundations in its premise that human development occurs through constantly evolving interactions between individuals and their multiple, interconnected environmental contexts. This model subdivides environmental influences into multiple levels reflecting the relative size, immediacy of interaction, and degree of formality/informality of the environmental setting (Campbell, Dworkin & Cabral, 2009).

The individual level comprises of bio-psycho-social characteristics of the person; the micro system focuses on direct interpersonal interactions between individuals and members of their immediate environment such as families, friends, and peers; the meso-system reflects interconnections and linkages between individuals and between individuals and systems; the exosystem includes organizations and social systems (e.g., legal, medical, and mental health); the macrosystem includes societal norms, expectations, and beliefs that form the broader social environment; and the chrono-system encompasses the changes that occur over time between persons and their multiple environments (Bronfenbrenner's, 1995). Many research studies have

adapted this approach to develop multilevel models to study GBV and its consequences (Krug, Mercy, Dahlberg, & Zwi, 2002; Campbell, Dworkin & Cabral, 2009).

Campbell, Dworkin and Cabral (2009) adapted Bronfenbrenner's model reviewing the existing publications and developed their own model to study impact of violence on women's' mental health. For this specific study, the ecological model was illustrated to see the impact of physical, sexual and emotional violence on mental health status among women with and without disabilities.

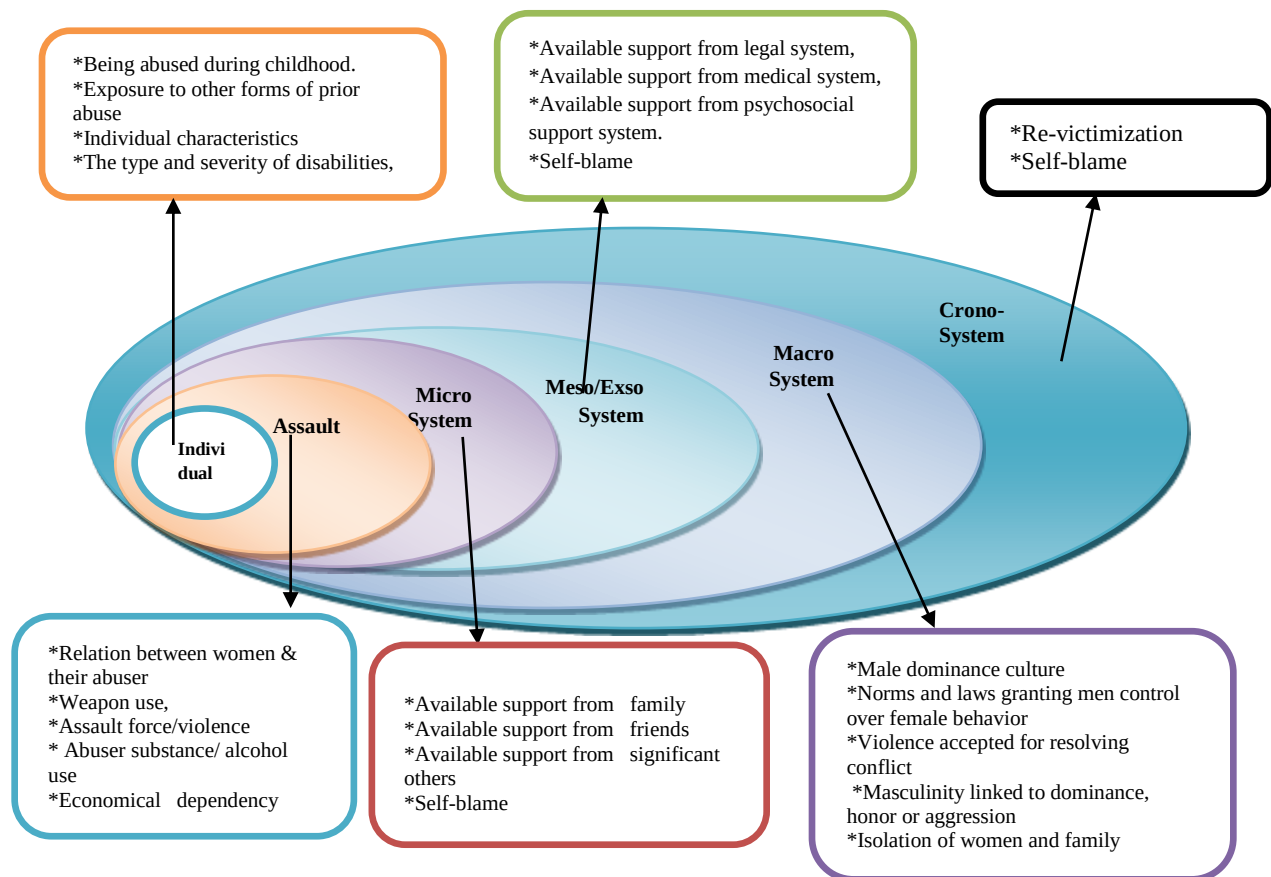


Figure 2 An Ecological Model of the Impact of Sexual Assault on Women's Mental Health

(Source: Bronfenbrenner, 1995; Heise, Ellsberg & Goldberg, 1999; Campbell, Dworkin & Cabral, 2009)

Individual level of analysis- characteristics of the victim could certainly influence the cause, consequence and recovery process of violence against women with and without disabilities. Campbell, Dworkin and Cabral's model examined age, ethnicity, education, marital status, employment status, income, personality characteristics, and preexisting mental health conditions were found to be socio-demographic correlates of violence and post-violence psychological distress. In addition, Foster and Sandel (2010) described that WWD experience type and severity of disabilities, manner of disabilities onset and biographical experiences were some of the conditions need to be observed at this level.

Characteristics of the assault itself affect women's psychological well-being. Neville and Heppner (1999) examined how the victim-offender relationship and the severity of injury differentially affect victims' distress. In addition to those factors, Campbell, Dworkin and Cabral's model explored the roles of threats to harm the victim, weapon use, partners' alcohol intake, substance use, assault force or violence, and substance use at the time of the assault in relation to victims' post-assault psychological sequel.

Micro-system level- Bronfenbrenner (1979) defined the microsystem as the face-to-face interactions and interrelations between individuals and others in their immediate setting; because the provision of (or denial of) social support occurs through direct interactions with family, friends, or peers. Campbell, Dworkin and Cabral's model explores the impact of disclosures to informal sources of support (e.g., family and friends) on victims' post-assault psychological distress.

Meso/exosystem factors-although Bronfenbrenner's model separates mesosystems (i.e., processes that contribute to link between systems and/or other individuals in the ecological environment) from exosystems (i.e., formal systems with which individuals may or may not have contact), Campbell, Dworkin and Cabral based on their literature analysis on violence and post violence sequelae suggest that empirically based distinctions between these levels were not yet warranted, which was consistent with Neville and Heppner's model. Consequently, Campbell, Dworkin and Cabral's model distinguish the combined meso/exosystem level from the prior micro system level by whether the interactions take place between informal supports (micro system) versus formalized supports (meso/exosystem). Accordingly, Campbell, Dworkin and Cabral's model explored the impact of disclosures to formal sources of support (e.g., available support from legal, medical, psycho-social support system) on victims' post-assault psychological distress.

Macro level- according to Campbell, Dworkin and Cabral, at the macro level, socio-cultural perspective was explored to understand the cultural related conditions for violence against women and its support to minimize post assault distress. Victims' post assault distress is also influenced by the rape-prone culture in which victims live, which remains highly acceptant of violence myths and stereotypes that women are to blame for their own victimization (Rozee & Koss, 2001).

The culture and social norms in a given society have positive or negative impact on the rate of violence on women in general and women with disabilities in particular. For instance, Foster and Sandel (2010) identify the social and institutional categorization "disabled" and the

associated discrimination as a shared thread. Social norms contribute to the stigmatization of women with disabilities as undervalued, undesirable, asexual, naive, and dependent, and give thus rise to abuse (Ibid). The greater vulnerability of women with disability can be understood in an intersectional perspective as simultaneous discrimination relating to disability and gender (Brownridge, 2006). Gender studies have shown that gender is a social, symbolic, and cultural construction (Schröttle & Glammeier, 2013).

Considering women in contrast to men as weak, passive, dependent, and in need of (male) help is still an influential social process. In the process of socialization, women establish subject positions between self-determination, autonomy, and heteronomy. Potential and experienced violence plays an important role, because it occurs on the basis of the construction of male violent potency and female vulnerability. It is not a difference in physical strength, but the embodiment of these social, symbolic, and cultural constructions that enables violence against women to be viewed as a “normal” and normalized part of society. Simultaneously, violence itself creates these gendered subject positions of potency and vulnerability, as well as the power or powerlessness to act. In this sense, intimate partner violence is gendered and gendering at the same time (Schröttle & Glammeier, 2013). Therefore, the above stated societal constructed negative attitude can influence the rate of violence as well as the magnitude of post violence psychological distress.

Chronosystem- Campbell, Dworkin and Cabral incorporated the chronosystem to reflect Bronfenbrenner’s idea that person-environment interactions are reciprocal and can be changed over time. There are normative transitional events (e.g., school changes) and non-normative

events (e.g., sexual assault) that shape how individuals interact with their environments and how their environments respond to them. The chronosystem examines the cumulative effects of multiple sequences of developmental transitions over the life course. Therefore, a history of sexual assault and other victimizations across the lifespan would influence the recovery process at each victimization (if more than one is experienced). Neville and Heppner conceptualized sexual re-victimization as an individual-level variable, but Campbell, Dworkin and Cabral view it as a historical lifespan factor that shapes how other levels in the model affect a recent victimization. At the chrono system, victims of cumulative trauma have been found to have greater self-blame and higher levels of trauma.

2.9 Conceptual framework of the study

To attain the objectives of the current study conceptual framework was developed based on Bronfenbrenner's (1995) ecological theory of human development and Compbell et al. (2009) integrated ecological model. This framework was developed by the researcher him-self. Based on these models, the objectives of the current research were observed.

- ✚ The prevalence and incidence rate of physical, sexual and emotional violence across the socio-demographic variables such as age, disability status (hearing, visual and physical disability and without disability), religion, and marital status, number of children; employment status, income and educational level were explored.
- ✚ Besides, the impacts of physical, sexual and emotional violence on women with and without disabilities mental health problem such as depression, anxiety, PTSD and self-esteem across demographic characteristics were assessed.

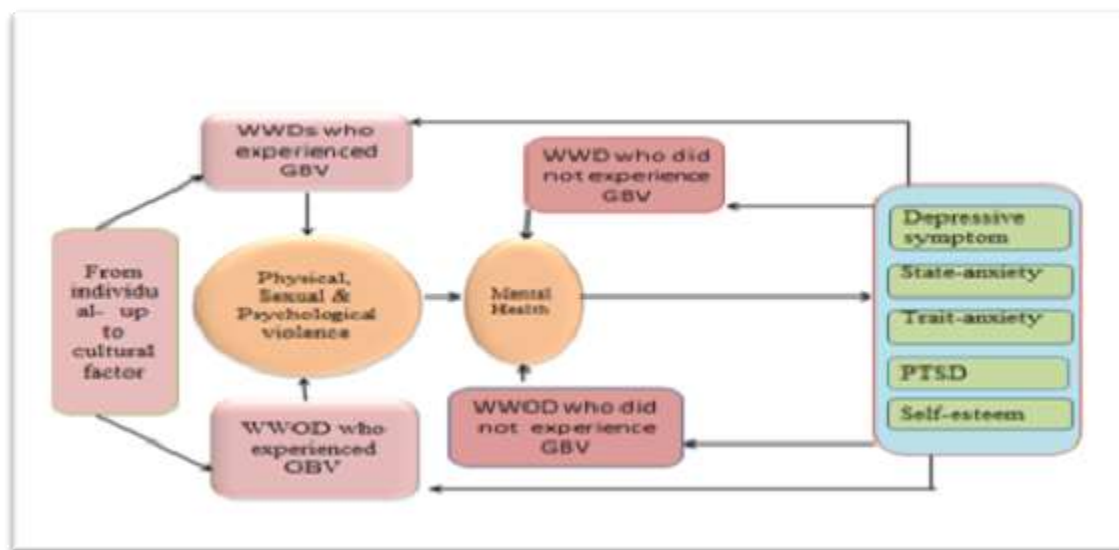


Figure 3 Conceptual frame work of the study

(Source: Developed by the current researcher)

- ✚ The current research also explored the prevalence of mental health problems specifically depression, anxiety, PTSD and self-esteem among women with and without disabilities that experienced physical, sexual and psychological violence.
- ✚ Furthermore, the research made visible the level of mental health problems specifically depression, anxiety, PTSD and self-esteem among women living with hearing, visual and physical disabilities and women without disabilities who experienced GBV.

2.10 Summary of the literature review

GBV is a broad term that encompasses physical violence (beating, punching, kicking, biting, burning, maiming or killing with or without weapons and trafficking), sexual violence (rape and marital rape, child sexual abuse, forced sodomy/anal rape, attempted rape/attempted forced sodomy, sexual exploitation, forced prostitution, sexual harassment and sexual violence as a weapon of war and torture) and psychological violence (verbal abuse such as insulting,

degrading, compelling the victim in humiliating acts whether in public or private, denying the basic expenses for family survival) and confinement (isolating the person from friends/family, restricting movements, deprivation of liberty or obstruction/restriction of the right to free movement) against women with and without disabilities.

Regarding the incidence and prevalence rate of GBV, different research studies reported that the problem of physical and sexual violence is more devastating in Ethiopia than any other countries. For instance, a multi-country research conducted by WHO, out of ten countries in the world, Ethiopia had been the first in the rate of GBV. This global study confirmed the seriousness of GBV in the country.

GBV against women can threaten the physical, reproductive health, mental health and overall wellbeing of the victims. When the victims are living with disabilities, the problems become double jeopardy. Their disabilities status worsens their rate of exposure and the problem that leads to different health and psychosocial complications. Literatures also revealed that women with disabilities experience more GBV than women without disabilities (Schröttle, & Glammeier, 2013).

Currently, it is difficult to get research publications that explore the effect of GBV on the mental health status of people with disabilities. However, there are researches on people without disabilities which confirmed the effect of GBV and mental health problems. For instance, the effect of GBV with depression (Campbell, 2002; Warshaw & Barnes, 2003 & Golding, 1999), anxiety (Ullman & Siegel, 1993; Thabet et al., 2015), PTSD (Warshaw, &

Barnes, 2003; Campbell, Sullivan & Davidson, 1995; Cascardi, & O'Leary, 1992) and self-esteem (Cascardi, & O'Leary, 1992) were confirmed by these studies.

Concerning the possible explanation for the cause of violence, Compbell, Dworkin and Cabral integrated ecological model was used. This model was derived from the work of Bronfenbrenner's (1995) ecological theory of human development. According to Campbell, Dworkin and Cabral, (2009) the personal characteristics of the victims, the nature of violence, the accessibility of formal and informal psycho-social support system such as therapeutic centers, health institutions, support from families, friends, and the effectiveness of legal procedure from police and legal systems, violence-prone culture, cumulative trauma and re-victimization over the lifetime were the conditions that determine the level of mental health status among the victims.

The intentions of the current study were to observe the incidence and prevalence rate of GBV among WWDs and WWODs and investigate the level of depression, anxiety, PTSD and self-esteem among the study participants who didn't experience GBV and across demographic variables.

Chapter Three

Methods

The purpose of this study was to examine the incidence and prevalence rate of GBV (physical, sexual and psychological violence) among women with and without disabilities in Addis Ababa. The study also aimed to inquire the association of GBV with mental health problems specifically depression, anxiety and PTSD and also with self-esteem. This chapter presented the methods used in the study including the study area, design of the study, study population, sampling procedures, instruments, data collection procedures, data analysis procedures and ethical considerations.

3.1 Site of the study

The study was conducted in Addis Ababa, the capital city of Ethiopia. According to Addis Ababa City Administration Bureau of Finance and Economic Development (AACABFED), Addis Ababa is the largest as well as the main political, economic, cultural and historical city of the country which was established in 1887 by Emperor Menilik II (AACABFED, 2013). The same report also depicted that Addis Ababa located 9°1'48"N latitude and 38°44'24"E longitude. The city is situated at the heart of the country, at an altitude ranging from 2,100M at Akaki in the South to 3,000M at Entoto Hill in the North (Ibid).

The city is divided in to ten sub-cities which are the second administrative units next to city administration. These are Arada, Bole, Nifaselk-Lafto, Akaki, Gulele, Addis Ketema, Yeka, Lideta, Kolfe-Keraneo and Kirkos (AACABFED, 2013).

3.2 Design of the study

To attain the objectives of the study correlational design was used. Specifically, descriptive comparative research design was employed.

3.3 Populations and Samples

3.3.1 Population of the Study

For the current study there were two populations. The first population includes women who were members of Ethiopian National Associations for People living with Visual Disabilities, Ethiopian National Association for people living with Physical Disabilities and Ethiopian National Association for People living with Hearing disabilities. Even though, these associations encompass members from different parts of the country, only members from Addis Ababa were taken in to the population of the study. The second group of population were WWOD who resident in the selected four Kebeles from Arada, Gulele, Kolfe-Keranyo and Addis-Ketema sub-cities.

For the current study the sampling frame was women with disability who met the inclusion criteria from the Ethiopian National Association for people living with Visual Disabilities, Ethiopian National Association for people with Physical Disabilities, and Ethiopian National Association for people with Hearing Disabilities. On filtering members who met the inclusion criterion (active member who paid membership fee during 2015 and 2016 and residents of Addis Ababa), 350, 300 and 250 women living with visual, hearing and physical disabilities had qualified to be included in the sampling frame. For WWODs, four Kebeles were selected purposively based on the similarity in socio-economic status with WWDs. As indicated in *Table 4*, in four Kebeles there were a total of 1936 households.

3.3.2 Samples and sampling procedure

Stratified random sampling technique using lottery method was employed to select women with disabilities from the three national associations. These three national associations were the strata. Based on these strata, 101 women with visual, 102 women with hearing and 100 women with physical disabilities were selected by using simple random sampling technique (lottery method). The number of these sample size were above the minimum number of samples for continuous data at $\alpha=0.05$, $t=1.95$ and margin of error $=0.03$ that calculated and forwarded by Bartlett et al. (2001).

Table 3
Population, sampling frame and samples of women with different disabilities

Sites	Numbers	Active members during 2015 and 2016 & residents of Addis Ababa	Samples drawn	%
Ethiopian National Association for People living with Visual Disabilities	1024	350	101	33.3%
Ethiopian National Association for People living with Hearing disabilities	966	300	102	33.66%
Ethiopian National Association for People Living with Physical Disabilities	873	250	100	33%
Total	2463	900	303	100%

On the other hand, WWOD were drawn from Arada, Kolfe-Keranyo, Addis-Ketema and Gulelae sub-cities using purposive sampling technique. From these sub-cities four Kebeles were also selected using simple random sampling technique. In the four Kebeles there were total of 1936 households. From these households, 177 WWOD were selected by using the above mentioned technique. The number of these participants were above the minimum number of samples for continuous data at $\alpha=0.05$, $t=1.95$ and margin of error $=0.03$ that calculated and forwarded by Bartlett et al (2001).

Table 4

Sampling frame and samples of WWOD

Sub-city	Kebele	Sample Drawn	Percent
Addis -Ketema	012	45	25.42
Arada	01	45	25.42
Gulele	04	43	24.29
Kolfe-keranio	08	44	24.85
Total		177	100

3.4 Instruments of the Study

GBV assessment instrument developed by World Health Organization (Garcia-Moreno et al., 2005), PHQ-9 Spitzer, Kroenke & Williams (1999), Posttraumatic Stress Disorder Checklist-Civilian (PCL-C) (Weathers et al., 1993), State-trait Anxiety Inventory (STAI) (Spielberg, 1989) and Rosenberg Self-esteem Scales (SES) (Rosenberg, 1965) were used to assess the extent of GBV and mental health problems and also self-esteem among WWDs and WWODs.

The instrument pack consisted of six instruments. The first one was demographic questionnaire which collected demographic characteristics of the study participants that consists of eleven items. This questionnaire gathered information about the individual characteristics of each participant such as their age, disability status, religion, occupational status, marital status, monthly income, educational status, duration in relation with partner, partners' use of alcohol and partners' use of Khat. The second one was GBV experience questionnaire which consisted of 10 items. The third one was PHQ-9 depression questionnaire that consisted of 9 items. The fourth one was state and trait-anxiety questionnaire which consisted of 40 items requested

participants' level of anxiety. The fifth one consists of 17 items that assessed participants PTSD level. The sixth one consisted of 10 items that requested data about participants' self-esteem.

Psychometric properties of the instrument were well established. A number of recent studies also confirmed the culture-fairness of these instruments across Ethiopian society. To check reliability of the instruments and to ascertain the feasibility of the study, pilot test was conducted among 40 randomly selected female students living with disability from Addis Ababa University.

By using pilot study it was ascertained about the psychometric property of each instrument and whether the questionnaires were clear to participants and if there was difficulty to understand and respond each item. Participants reported that there was no difficulty in completing the instruments. Cronbach's alpha was computed to determine the internal consistency of the instruments. The results of the pilot study were presented in the next sections. A detailed description of all the instruments used is supplied below.

3.4.1 Socio-Demographic Questionnaire

To collect data about the socio-demographic characteristics of the participants 11 items were prepared. The items assessed the age, disability status, religion, and marital status, number of children, occupation, monthly income, educational status and partner's alcohol and Khat use of the study participants.

3.4.2 Measure of GBV

To assess the presence of physical, sexual and psychological (emotional) violence, WHO's violence measuring instrument was used. The questionnaire was developed and validated for use in ten countries in the world including Ethiopia (Garcia-Moreno et al., 2005). The instrument measures the presence of physical, sexual and psychological violence within 12 months and during participants' life time.

To measure physical abuse participants were asked to rate whether they had been slapped, beaten, kicked or dragged and choked or burnt; or whether they had been threatened with or injured by a weapon or any other object with the intention to inflict physical hurt, either by an intimate partner (husband or boyfriend) or by any other man during their life time or for the last twelve months.

Next, to assess the presence of sexual violence, participants were asked whether they have been physically forced to have sexual intercourse when they did not want to, forced them to do something sexual that they found degrading or humiliating and touched them sexually in a way they did not approve.

In relation to emotional abuse, participants were asked whether they have been disgraced, scared, intimidated, impeded for decision making, verbally abused, isolated from friends/family members. They were also asked whether they have experienced self-blame, fear, hopelessness, suicidal ideation, suicidal attempt and alcohol dependency. Finally, they were requested whether there is poor achievement/failure from day to day activities, usual activities,

rejection from family/friends as a result of physical, sexual and emotional violence during the last 12 months and before 12 months. These three items were multiple response type.

Even though, the instrument developed and validated for different societies for various cultures globally including Ethiopia, the instrument was given for a scholar in Addis Ababa University Institute of Gender Studies to comment on the validity of the instrument. Based on the comment, for physical, sexual and psychological violence, the responses were modified as “Never”, “Yes, during the last 12 months” and “Yes, before the last 12 months” format. Regarding interpretations of the responses was concerned, for physical, sexual and psychological violence one “Yes” response qualified for the presence of specific type of violence.

3.4.3 PHQ-9 (Patient Health Questionnaire)

To measure the level of depression, PHQ-9 (Spitzer, Kroenke & Williams, 1999) was used. The PHQ-9 consists of nine questions. Each of the questions asked participants to select the frequency of the depressive symptoms. This self-administered questionnaire was developed for the purpose of measuring depression in primary care setting based on DSM-IV diagnostic criteria. It was developed based on the nine depressive symptoms in DSM-IV. These symptoms were depressed mood, significant reduced level of interest in most activities, loss of appetite, insomnia, agitated or slowed down behavior, guilt, poor concentration, feeling fatigue and thoughts of death (Ibid).

Regarding the response categories of PHQ-9, each item is responded from 0 (not at all), 1(several days), 2(more than half the days) and 3 (nearly every day). In relation to scoring and interpretation of the data, the scale has a minimum score of 0 and maximum of 27. Score from 0-

4 and 5-9 indicate no depression at all and mild depression respectively. Scores from 10-14 and 15-19 indicated moderate depression, moderately severe depression respectively. Score from 20-27 corresponds to severe depression (Spitzer, Kroenke, Williams, 1999). For the current study the same cut of points were used.

Regarding the psychometric property of PHQ-9 it has high reliability, that is, Cronbach's α coefficient was 0.86 and the test-retest reliability was 0.95. The correlation coefficient of the nine items with the total score of the scale was 0.59 - 0.78 (Spitzer, Kroenke & Williams, 1999). The psychometric property of PHQ-9 when studied and translated into many languages was found to be strong. For instance, the psycho-metric property of PHQ-9 in Ethiopia showed good internal consistency (Cronbach's $\alpha=0.85$) and test re-test reliability (intra class correlation coefficient=0.92 among 926 adults (≥ 18 years of age) attending outpatient units at Saint Paul General Specialized Hospital in Addis Ababa (Gelayea et al., 2014). This can be an indicator for the suitability of the instrument for Ethiopian participants and cultural context.

PHQ-9 has good validity. Sensitivity (illustrates how often this screening tool accurately identifies the existence of depression) and specificity (illustrates how often PHQ-9 accurately rules out women are not with depression) are important concepts to measure what we need to measure. Concerning PHQ-9, Spitzer, Kroenke & Williams (1999) reported that it has high sensitivity and specificity that is accuracy=85%, sensitivity=75% and specificity=90%. In addition, PHQ-9 has relatively strong correlation with other depression measuring scales. For instance, Fann et al. (2005) in their study of validity of PHQ-9 reported that Pearson's correlation between the PHQ-9 scores and other depression measures was 0.90 with the Hopkins

Symptom Checklist depression subscale and 0.78 with the Hamilton Rating Scale for Depression.

For the current study pilot test was conducted among 40 randomly selected female students living with disabilities in Addis Ababa University. The result indicated that $\alpha=0.901$ for the nine items at 95% confidence interval. Next, the face and content validity of the instrument were re-established by two mental health professionals and one clinical psychologist from Amanuel Specialized Hospital in Addis Ababa who had ample experience in the area of diagnosis and intervention of mental health problems. Both the Amharic and English versions of the instrument were given for these mental health professionals.

PHQ-9 was selected for the current study because of various reasons. Primarily, this scale was relatively manageable to administer and score. Secondly, it has sound psychometrical property and culturally validated to Ethiopian context by US and Ethiopian researchers (Gelayea et al., 2014). Finally, the pilot study result on reliability and comments given by the mental health professionals on face and content validity proved the appropriateness of the instrument for the current study.

3.4.4 State-Trait Anxiety Inventory (STAI)

To measure the level of anxiety among women with and without disabilities, Spielberger's State-Trait Anxiety Inventory (STAI) (Spielberger, 1989) was used. This scale is one of the most frequently used measures of anxiety in applied psychology researches. The STAI scale consists of two 20-item self-report measures. The STAI-S assesses how respondents feel "right now, at this moment" (e.g., "I feel at ease"; "I feel upset"), and the STAI-T targets how respondents "generally feel" (e.g., "I am a steady person"; "I lack self-confidence"). In addition, the STAI

each has been found to contain state and trait factors, which Spielberger labeled anxiety present and anxiety absent (Spielberger, 1983). Respondents were asked to rate themselves on each item on the basis of a 4-point scale, ranging from “not at all” to “very much so” for the STAI-S and from “almost never” to “almost always” for the STAI-T.

Regarding the psychometric property of STAI is concerned, it has demonstrated excellent internal consistency ($\alpha = 0.89$), and the STAI Trait has evidenced excellent test-retest reliability ($r = 0.88$) at multiple time intervals (Barnes, Harp & Jung, 2002). Also, as would be expected given the nature of the construct, Barnes, Harp and Jung (2002) reported lower temporal stability for the State version of the STAI (average $r=0.70$). The measures have evidenced adequate convergent and discriminate validity with other measures of state and trait anxiety and have been shown to differentiate patient from control samples on the STAI Trait and participants in highly stressful situations (e.g., military recruits) from control samples (for example student samples) on the STAI State (Spielberger, 1983).

This scale was used for the current study because of its sound psychometric property and suitability for cultural diverse participants in developed as well as developing countries including in Ethiopia. For instance, Mulatu (2002) in his study, the validation of Amharic version of STAI, high internal consistency coefficients were found for STAI-S ($\alpha = 0.87$) and STAI-T ($\alpha = 0.85$).

Regarding the validity of STAI, considerable evidence attests to the construct and concurrent validity of the scale (Spielberger, 1989). In addition, Mulatu (2002) in his study of the validation of the Amharic, Ethiopian national language, version of STAI among University students reported that State Anxiety under the hypothetical exam condition was higher than the

mean score under normal condition. This finding confirmed that the hypothesis that State Anxiety increases under stressful conditions (Spielberger, 1989). Mulatu (2002) also reported that the convergent validity of scores on State Anxiety was shown by students' statistically significant positive correlation with a measure of recent life event stress. Convergent validity of the Trait Anxiety was also shown by their positive and statistically significant relationship with the measure of global psychopathology (Ibid). Therefore, these findings confirmed that both state and trait anxiety measures are appropriate measures of anxiety in Ethiopia context.

For the current study, to maintain the validity of the instrument, clarification was given for participants about the instruction of both state and traits instruments. This was supported by Kayikcioglu et al. (2017) the validity of the STAI rests upon the assumption that the examinee has a clear understanding of the “state” and “trait” instructions.

Regarding the interpretation of data, the higher the score implied the higher the level of anxiety. According to Spielberger (1989) the cut-off point was obtained by calculating the mean and standard deviation based on the group responses. To get the upper cut-off point adding the standard deviation on mean value and the lower limit obtained by subtracting standard deviation from the mean. For instance, Meades and Ayers (2011) in their study on the level of anxiety among pregnant women, recommend cut-off of point high (≥ 40), moderate 32-33, low (≤ 25) anxiety on the basis of mean trait scores of a sample of 94 primiparae ($M = 33.1$, $SD = 8.1$).

For the current study, pilot test was conducted among 40 randomly selected female students in Addis Ababa University. The result indicated that $\alpha = .83$ for the twenty items for STAI-S anxiety and $\alpha = 0.81$ for STAI-T anxiety at 95% confidence interval. For further

clarification see Appendix C. Regarding content validity, the Amharic and English versions of STAI was given for a psychiatrist and a clinical psychologist in Amanuel Specialized Hospital in Addis Ababa who have ample experience in the area of diagnosis and intervention of mental health problems. Comments from these experts were incorporated on the final version of the instrument.

Regarding the interpretation, the higher the score indicate the severe the level of anxiety. For the current study, the cut-off point was determined based on the mean score 47.66 (SD=8.81) for STAI-S. The upper and lower boundaries were determined by adding and subtracting standard deviation on the mean score. Accordingly, 39 and 56 become the lower and upper boundaries respectively. By using similar method for STAI-T the mean score 48.31(SD=7.08,) was calculated. Then, 41 and 55 became the lower and upper boundaries respectively.

3.4.6 PTSD checklist: Civilian scale (PCL-C)

To measure the level of PTSD among women with and without disabilities Posttraumatic Stress Disorder Checklist (PCL) was used. The PCL is an easily administered self-report rating scale for assessing the 17 DSM-IV symptoms of PTSD that requires about 5-10 minutes to complete (Weathers, Litz, Herman, Huska, & Keane, 1993). PCL is one of the most widely used instruments for research purpose. For instance, Jon and his colleagues in their review of forty-one published studies indicated that PCL is the second most commonly used instrument (16%) next to Clinician-Administered PTSD scale (23%) (Jon et al., 2005).

According to National Center for PTSD (2012) PCL-C was a general civilian version that is not linked to a specific event; the questions refer to “a stressful experience from the past”. PCL-C was one of the well-established self-report instruments to correspond closely with each of

the 17 DSM-defined PTSD symptoms (Ruggiero, Del Ben, Scotti, & Rabalais, 2003). PCL-C consists of 17 items. For example, an item included “Repeated, disturbing memories, thoughts, or images of a stressful experience from the past?” And the responses ranged from “Not at all (1) to Extremely (5)”. And the possible scores range from 17 to 85 and takes 8-13 minutes in average.

According to Weathers et al. (1993) compared with other PTSD instruments, PCL-C yield information that has greater predictive utility on a diagnostic level. Indeed, several psychometric studies have supported the reliability and validity of the PCL with a variety of samples (e.g., combat veterans, college students, motor vehicle accident victims), including diagnostic sensitivity and specificity, internal consistency, test-retest reliability, convergent validity, and discriminant validity (Blanchard et al., 1996; Ruggiero et al., 2003; Weathers et al., 1993).

For instance, Keen, Kutter, Niles and Krinsley (2008) reported that PCL-C has an excellent internal consistency that was 0.97 and test re-test reliability 0.96 over a 2-3 day period. The PCL-C correlates strongly with other measures of PTSD, such as the Mississippi Scale, the PK scale of the MMPI-2, and the Impact of Events Scale, and also correlates moderately with level of combat exposure (Blanchard, Jones-Alexander, Buckley & Forneris, 1996).

Regarding the interpretation of the data, there was no definitive cut-off threshold exists for PCL-C for DSM-IV. Studies recommend varying cut-off values depending on the prevalence of PTSD in the population being studied, the setting and the goal of assessment (Bliese et al., 2008). Accordingly, the lower the prevalence, the lower the clinician/researcher set the cut-off point, as the goal was to be as accurate as possible in identifying cases of PTSD (VA National

Center for PTSD, 2014). Settings where PTSD is less common, such as primary care clinics, may require more sensitive cut-off thresholds than settings where higher rates of PTSD are expected, such as a specialty mental health clinics (VA National Center for PTSD, 2014).

A higher cut-off point was also considered when using the assessment to inform diagnosis or minimize false positives (VA National Center for PTSD, 2014). According to Bliese et al. (2008) literature review of appropriate cut-offs for the PCL for DSM-IV, when the sample was composed of a high risk group of Vietnam veterans; a cut-off of 50 was recommended.

Regarding the validity of PCL, factor analysis on data derived from the Persian Gulf war veterans suggested that the items are best accounted for by a single factor (Weathers et al., 1993). In a Vietnam veteran sample, the PCL-M was significantly correlated with other measures of PTSD (r range from .77 to .93) and a measure of combat exposure ($r = .46$) (Weathers et al., 1993). Among Persian Gulf veterans, the PCL-M was significantly associated with another measure of PTSD (.85) (Weathers et al., 1993).

Many studies have assessed the diagnostic efficiency of the PCL. Weathers et al. (1993) found that at a cut-off of 50, the PCL-M predicted PTSD diagnosis derived from a structured clinical interview with a sensitivity of 0.82 and a specificity of 0.84. Blanchard et al. (1996) found the same cut-off yielded a sensitivity of 0.78 and a specificity of 0.86, and that a cut-off of 44 improved the sensitivity to 0.94 and specificity to 0.86 with an overall diagnostic efficiency of 90%. More specifically, Lang et al. (2003) study on sensitivity and specificity of the PCL-C among female veterans in primary care reported that result provide qualified support for the use of the PCL-C total score with a lowered cut-off score as a screening measure for PTSD.

When the sample was composed of severe accident and sexual assault victims, 44 was the recommended cut-off point (VA National Center for PTSD, 2014; Blanchard et al., 1996). Similarly, publication on domestic violence for medical professionals reported that scores of above 44 are considered indicative of possible PTSD (Florida State University, 2014). Based on severe nature of GBV as well as recommendation previous works in the thematic areas, 44 were taken as a cut-off point for the current study.

To check the reliability of the instrument, pilot test was conducted among forty randomly selected female students living with disabilities in Addis Ababa University. Based on the findings of the pilot test, the reliability was obtained $\alpha=0.87$ for the 17 items at 95% confidence interval. For further clarification (see Appendix C). Furthermore, to maintain the validity of the instrument the Amharic and English version of the instrument were given for a psychiatrist and a clinical psychologist in Amanuel Hospital in Addis Ababa. The comments were incorporated in the final version of the instrument.

3.4.7 Rosenberg's Self-Esteem Scale (RSES)

To measure self-esteem, Rosenberg's Self-Esteem Scale (RSES) was used. This scale is one of the most widely used instruments to assess global self-esteem. This scale contains ten items and responded on a scale ranging from 0 (strongly disagree) to 3 (strongly agree). RSES was a measure of global self-worth half of which were positively and the other half negatively worded. The scale measures state of self-esteem by asking the respondents to reflect on their current feelings.

Regarding the psychometric property of the RSES, it has a Cronbach's α coefficient range from 0.85 up to 0.90 for general populations (Rosenberg, 1979). Rosenberg (1965) also reported validity and the criterion validity was 0.55 and the construct validity was correlated 0.64 with anxiety, and 0.54 with depression. As to scoring, negative items were reverse scored. To re-asertain the content validity of the instrument, the English and Amharic versions were cross checked by psychometrician in Addis Ababa University. Content validity of the instrument was examined by the experts and the feedbacks confirmed that the instrument was said to have good content validity. The pilot was conducted and the scale has high internal consistency. The Chronbach's alpha was $\alpha = .84$ which was fairly good internal consistency (see Appendix C).

Negative items were reverse scored. Concerning interpretation and scoring of the data, total score range from 0-30, with a high score representing a high self-esteem status. Scores between 15 and 25 are within normal range, scores below 15 suggest low self-esteem and score greater than 25 indicate high self-esteem (Rosenberg, 1965). For the current study the same cut-off points were used. The reliability coefficients obtained through the pilot study and the final data are summarized and presented in *Table 5*

Table 5

Reliability Coefficients of the five Standardized Instruments

No	Measure	Reliability from the pilot study	Reliability from the final data
1	Patient Health Questionnaire(PHQ-9)	0.902	0.863
2	State-Trait Anxiety Inventory(STAI-S)	0.832	0.820
3	State-Trait Anxiety Inventory(STAI-T)	0.821	0.755
4	Post-traumatic Stress Disorder Checklist: Civilian Scale (PCL-C))	0.873	0.875
5	Rosenberg's Self-Esteem Scale (RSES)	0.844	0.790

3.4.7 Translation of the Instruments

The English versions of the whole booklet (GBV measuring instrument, PHQ-9, STAI-S, STAI-T, PCL-C and RSES) were translated into Amharic language by professional language translators. Then, the Amharic and English language versions were checked by a language expert and a psychologist who graduated in PhD level from Addis Ababa University. All the comments from the above mentioned scholars were incorporated in the final Amharic & English versions of the instruments.

3.5 Procedure of Data Collection

Being the first step, permission to conduct the study was obtained from the management bodies of Ethiopian National Associations for People living with Visual Disabilities, Ethiopian National Association for People living with Hearing disabilities, Ethiopian National Association for People Living with Physical Disabilities. The management bodies from the three organizations were informed about the nature and purpose of the study and requested them to facilitate to contact the study participants and arranged private rooms to secure participants during the data collection.

The next activity was recruiting and training of the research assistants. The researcher selected three women data collectors who graduated at BA degree level in psychology, special needs education and social work. In addition, based on the recommendation from Ethiopian National Association for People living with Hearing disabilities one woman who graduated at certificate level with ample experience in sign language translation was selected. Then, the questionnaire was given to each of the assistant researchers ahead of time. Training was given to all research assistants. The training was focused on explaining all items so as to familiarize the

assistants with the parts of the questionnaire and on the way how the questionnaire had to be administered. In addition, they were informed about the overall objectives of the study, nature of the instruments and how to handle the responses of the participants.

To gather the intended data, women living with physical, visual and hearing disabilities participants were contacted via their national disabilities associations. Participates who were selected through the sampling procedure were contacted through their address from the respective organization and scheduled for the data collection process.

Based on the outlined program to collect data from women living with visual and hearing disabilities they were contacted in privately secured room in their respective organization compound. First the assistant researchers introduced themselves, explain the objective of the data collection and what expected from them. Then, they asked whether they would “agree” or “disagree” to proceed to the actual data collection process. If they agreed to proceed in the data collection process they signed the consent form. On the contrary, those who disagreed to proceed with the data collection process, they were acknowledged and stopped the data collection process. For individuals who were willing to proceed with data collection process, the assistant researcher read each item and received and marked their response on the instrument based on the instruction given.

Data gathered from women living with physical disabilities were collected in two ways. Majority of the participants responded to the instrument by themselves. On the other hand, for the remaining participants who are not able to read the instrument was administered by the help of assissitant researcher like that of women living with visual and hearing disabilities. Throughout these processes, the researcher facilitated and supervised the data collection process.

Out of the total women with visual, hearing, physical disabilities who had been to involve in the study 96.1% had agreed and signed on consent form and provided the required data for the study.

Data from women without disabilities were gathered in four Kebeles from Arada, Kolfe-Keranyo, Addis-Ketema and Gulelae sub-cities in Addis Ababa. First of all, the researcher contacted the higher management bodies of the selected Kebeles to get permission to undertake the data collection process. Next, based on the residential list that was obtained from each Kebele participants were selected. By using their residential and telephone addresses, the researcher and assistant data collectors contacted those participants.

Before the data collection, the overall objectives of the study and what was expected from them were clearly informed. Participants who were voluntary to participate were identified and personally contacted for the actual data collection process with assistant researchers. As a result of Kebele management officials' cooperative effort, most of the data collection was undertaken in each Kebele compound during the weekend days. The administration process was conducted both by self-administration (by the participants themselves) and by the help of assistant data collectors or help of readers. From the total women without disabilities who were requested to involve in the study, 94.7% of them voluntarily participated in the study.

3.6 Data Analysis

When the data collection was completed, the questionnaires were checked by the researcher and assistant data collectors. This process helped to make sure that the questionnaires were complete and not missing any information during the administration process. Further cleaning was done at the end of data entry by running frequencies for each variable in order to identify and manage outliers, abnormal values and missing values. Some missing values

especially on the dependent variables were excluded. For example, out of the total four hundred eighty participants seven women provided incomplete information and excluded from the analysis. Data from questionnaire were analyzed by means of descriptive and inferential statistical techniques. For these purpose, SPSS version 20 of statistical package was employed.

Descriptive statistical analysis were initially used to explore socio-demographic characteristics such as age, educational level, marital status, employment status, partners' alcohol and Khat use. Data related with the prevalence and incidence rate of physical, psychological and sexual violence among women with physical, hearing, visual disabilities and women without disabilities were also analyzed by using descriptive statistics. Similarly, descriptive statistics were used to analyze the most common type of violence from physical, sexual and psychological violence among women with and without disabilities. By using the same statistical technique, the prevalence rate of depression, anxiety, PTSD and the level of self-esteem among women with and without disabilities who experienced and didn't experience GBV were analyzed.

A one-way between groups multivariate analysis of variance (MANOVA) followed by univariate post-hoc comparison or independent samples t-test was used to explore if there existed any significant differences on the level of depression, anxiety, PTSD and self-esteem as a result of GBV across demographic variables specifically age, marital status and partners' alcohol use.

Similarly, one-way between groups MANOVA followed by independent sample t-test was computed to investigate if there are any significant differences on the level of depression, state and trait anxiety, PTSD and self-esteem among women with and without disabilities who experienced GBV.

A one-way between groups MANOVA followed by independent sample t-test was also performed to investigate the presence of statistical significant difference on the level of depression, anxiety, PTSD and self-esteem between women with disabilities who experienced and didn't experience physical, sexual and psychological violence.

Finally, a one way between groups MANOVA was performed to explore whether there were statistically significant difference on the level of depression, state-anxiety, trait-anxiety, PTSD and self-esteem among women with visual, hearing and physical disabilities.

3.7 The MANOVA Assumptions

There are a number of assumptions of MANOVA that must be met before selecting MANOVA as a method of data analysis. Hence, normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices and multi-collinearity were checked before using MANOVA. The assumptions and data analysis of the objectives of the study were presented.

◆ Multivariate Normality

The normality of the data was assessed by using Mahalanobis distances method. The procedure used to check for normality was helpful to identify any outliers; since, MANOVA is quite sensitive to outliers. Hence, the maximum value for Mahalanobis Distance obtained (17.8) was less than the critical value (20.52). Therefore, there was no substantial multivariate outlier (see Appendix E).

◆ Outliers

Concerning assumption related with outliers, one of the most commonly used method, box plot method was used. As a result, the score of the five dependent variables depression, state anxiety,

trait anxiety, PTSD and self-esteem were not violating the assumption of outlier (see Appendix F).

◆ **Linearity**

This assumption refers to the presence of a straight-line relationship between each pair of the dependent variable. This was assessed using a matrix of scatter plots between each pair of variables separately for the two independent variables (i.e., women with and without disabilities who experienced GBV). As it is indicated in the figure (see Appendix G), scatter plots among all pairs of variables within each group were inspected for signs of nonlinearity. While some plots indicated slight departure from linearity, there was no evidence of true curvilinearity. Therefore the assumption of linearity was satisfied.

◆ **Multicollinearity**

MANOVA works best when the dependent variables are moderately correlated. As a result, correlation was run to check the strength of the correlations among the dependent variables. Hence, in this analysis very high positive correlation ($>.85$) was not achieved in any of the dependent variables (i.e., depression, state anxiety, trait anxiety, PTSD and self-esteem) (see Appendix-H). For this study, the five dependent variables did not violate the assumption of multicollinearity. Therefore, computing MANOVA was appropriate. (For further clarification see Appendix H).

◆ **Homogeneity of variance-covariance matrices**

Homogeneity of variance-covariance matrices was assessed by using Box's Test M. The analysis result indicated that the p-value was greater than 0.05, meaning that there is no

suggestion of heterogeneity. Therefore, the assumption of equality of covariance for that variable is not violated in this study (see Table 15 and Appendix I).

Table 15

Box's test of equality of covariance matrices

Box's Test of Equality of Covariance Matrices^a	
Box's M	24.918
F	1.642
df1	15
df2	878205.813
Sig.	.065

◆ **Homogeneity of regression**

This assumption is important only if the researcher would have been intended to perform a step down analysis and if the researcher would also have some theoretical or conceptual reason for ordering the dependent variables (Pallat, 2001). Therefore, computing homogeneity of regression was beyond the scope of this research.

In addition to the above information, for all analysis in the current research the eta squared result was interpreted based on Cohon (1988) guideline. Accordingly, 0.01 = small effect, 0.06= moderate effect and 0.14 large effect were forwarded and this guideline was used for the current study.

3.8 Ethical Considerations

Considering the sensitivity of GBV, care was taken in designing and structuring the questionnaire to maintain confidentiality. As a result, participants were not asked or allowed to introduce or write their name and their addresses at any part of the instrument pack. Ethiopian

National Association for people living with hearing disability, Ethiopian National Association for people living with visual disability, Ethiopian National Association for people living with Physical disability were informed through a formal letter from the Department of Special Needs Education, Addis Ababa University. As a result, these national organizations facilitated condition like secured room for the data collection that helped to maintain the confidentiality of the data and privacy of the participants.

Before the actual data collection processes, the overall intentions of the research work were informed to the participants. They were also informed their right to withdraw at any stage of the data collection procedure if they feel uncomfortable about the process. Next, the researcher and assistant data collectors asked participants whether they were voluntary to participate in the study. Then, only volunteer subjects were involved for the study. They approved their agreement to participate in the study both by signing on the consent form and verbal expression. Almost all the administration processes were conducted in separate rooms and offices that were facilitated by the respective people with disabilities national association and the four selected Kebeles' for people without disabilities. During the data collection, there was no any kind of physical, social and psychological mistreatment that threatens the normal health of the participants. Generally, privacy was kept and confidentiality was assured by the researcher and assistant researchers about the information that were provided by the participants.

CHAPTER FOUR

RESULTS

The purpose of this study was to examine the incidence, prevalence and extent of GBV against women with and without disabilities. The study also aimed at exploring the association of GBV with mental health problems like depression, PTSD, anxiety and also self-esteem.

Out of the total four hundred and eighty respondents, seven women WWODs provided incomplete information; as a result, they were excluded from the analysis. Consequently, four hundred and seventy-three women who provided the necessary data were taken as respondents of this study. Therefore, the analyses were conducted among three hundred and three women with disabilities and one hundred and seventy women without disabilities.

This chapter begins with presenting the demographic characteristics of the respondents. Results of this study were organized based on the sequential order of the research questions. The first three research questions addressed the incidence and prevalence rates of physical, sexual and psychological violence among women with and without disability in Addis Ababa. Further, participants described the extent of mental health problem (depression, PTSD and anxiety) and also self-esteem. The extent of GBV across some selected demographic variables was assessed by the fourth research question. The fifth research question investigated whether there was statistically significance difference on the level of depression, anxiety and PTSD and also self-esteem between women with and without disabilities who experienced GBV. The six research question answered whether there was statistically significant difference on the level of mental health problems and self-esteem among women who experienced and not experienced GBV.

The last research question responded whether there was statistically significant difference on mental health problems and self-esteem among women living with visual, hearing and physical disabilities who experienced GBV. Research questions from four up to seven were computed by using multivariate analysis of variance (MANOVA).

4.1 Socio-Demographic Characteristics of the Study Participants

In this section, the socio-demographic characteristics of the study participants were presented. As indicated in *Table 6*, majority of the respondents, 73.8% were between 15- 34 years old. From the total study only one fourth of them were 35 and above years old. Regarding respondents' disability status, proportional numbers of women with disabilities (visual, hearing and physical) were participated in the study. However, when we compare the two groups based on their disability status, the total number of women living with disability was higher than women without disabilities.

Concerning participants' religious status, more than half of the study participants were Orthodox Christians and 111(23.5%) were Muslims. The major portion of the respondents belonged to orthodox Christians and Muslims, as these religions are the dominant religions in the central Ethiopia from where most of the respondents came. Catholic, protestant and others together accounted 85(18%) were of the total study subjects. In relation to marital status, almost half of the study participants were never married and 167(35.3%) were married. Regarding duration in relation with the current husband/partner, 173(36.6%) reported that they lived from 1-3 years, 114(24.1%) said less than one year and 97(20.5%) said more than 6 years and the remaining 89(18.8%) reported 4-6years.

Table 6

Socio-demographic Characteristics of the Study Participants (n=473)

No	Demographic characteristics	n	(%)
1	Age		
	15-24	159	33.6
	25-34	190	40.2
	35-44	97	20.5
	45-54	25	5.3
	55+	2	0.4
2	Disability Status		
	Visual	101	21.4
	Hearing	102	21.6
	Physical	100	21.1
	No disability at all	170	35.9
3	Religion		
	Orthodox	277	58.6
	Muslim	111	23.5
	Catholic	17	3.6
	Protestant	60	12.7
	Others	8	1.7
4	Marital status		
	Never married	233	49.3
	Married	167	35.3
	Divorced	54	11.4
	Separated	10	2.1
	Widowed	9	1.9
5	Duration in relation		
	Less than one year	114	24.1
	From 1-3 years	173	36.6
	From 4-6 years	89	18.8
	More than 6 years	97	20.5
6	Number of children		
	No children	204	43.1
	1-3 Children	181	38.3
	4-6 children	71	15.0
	>6 children	17	3.6

As indicated in Table 7 almost one fourth of the total respondents had no occupation, similarly almost comparable numbers of participants were housewives.

Table 7
Socio-demographic Characteristics of the Study sample (n=473)

No	Demographic characteristics	n	(%)
1	Occupation		
	House wife	118	24.9
	Trader	89	18.8
	Government employee	86	18.2
	Daily laborer	24	5.1
	No occupation	120	25.4
	Other	36	7.6
2	Monthly Income		
	<1000 Birr*	233	49.3
	1000-2000Birr	143	30.2
	2001-3000 Birr	78	16.5
	3001-4000 Birr	12	2.5
	4001-5000Birr	6	1.3
	>5000Birr	1	0.2
3	Educational Level		
	Illiterate	88	18.6
	Primary education	65	13.7
	Secondary Education	158	33.4
	Vocational training	37	7.8
	College diploma	71	15.0
	University Degree	50	10.6
	MA degree and above	4	0.8
4	Partners' alcohol intake		
	Yes	226	47.8
	No	247	52.2
5	Partners' Khat (Catha edulis Forsk)Use		
	Yes	163	34.5
	No	310	65.5

* 1\$ =27 Ethiopian Birr at November, 2017.

Moreover, equal number of traders and government employees 89(18.8%), and 86 (18.2%) participated in the study. The remaining participants were from different occupations like students, daily laborers and run their own private business and the like.

The other demographic variable was participants' monthly income. As clearly displayed in *Table 7*, almost half of the study participants earned less than one thousand Birr per month. Thirty percent of the total participants earned from one thousand up to two thousands Ethiopian Birr per/month. Very few respondents earned three thousands and above Birr per month. This implies that women in general and women with disabilities in particular were living in a very low economic status.

As clearly indicated in *Table 7* more than half of the respondents 311(65.7%) were educated up to secondary education, elementary and some were totally illiterate. This also revealed the low level of women's educational status that can have direct relation with economical dependency on others. Only 54(11.4%) were graduated from University at BA and MA degree level. The other demographic variables that have direct relation with violence were husband/partner alcohol intake and substance abuse. Almost half of the respondents reported that their husbands/partners drink alcohol and almost one third of the total respondents reported that their husbands/partners chew "Khat" (*Catha edulis* Forsk).

4.2 Incidence and Prevalence Rate of GBV among WWD and WWOD

One of the major objectives of this study was to determine the incidence and prevalence rates of GBV among WWD and WWOD in Addis Ababa. GBV assessment instrument was administered for 303 women with disability and 170 women without disabilities.

Accordingly, out of the total WWDs respondents, more than half 193(63.7%) experienced physical violence during their lifetime. On the other hand, 170 women without disabilities, half of them reported that they experienced physical violence by their husbands/partners or by any other person during their lifetime. Regarding the incidence rate of physical violence, 127(41.9%)

of women with disabilities experienced physical violence by their husbands/partners during the last 12 months. On the other hand, out of one hundred and seventy respondents one third of WWODs experienced physical violence by their husbands or partners during the last 12 months.

Table 8

Prevalence and Incidence Rate of GBV among Women WWD and WWODs

Disability Status	Physical Violence		Sexual Violence		Psychological Violence		Composite	
	Ever (%)	Current (%)	Ever (%)	Current (%)	Ever (%)	Current (%)	Ever (%)	Current (%)
WWD	63.7	41.9	67.6	41.58	74.2	64.3	84.1	76.56
WWOD	53.5	34	51.8	42.9	68.8	37.1	76.48	60

Women with and without disabilities were also asked of their life time experience of sexual violence. As shown in *Table 8*, majority of the women with disabilities experienced sexual violence during their life time. On the other hand, half of the women without disability 51.8% experienced sexual violence during their life time. In relation to incidence rate of sexual violence, about 41.58% of women with disabilities experienced sexual violence during the last 12 months.

Regarding psychological violence, majority of WWDs 74.25% experienced psychological violence even more than the rate of physical as well as sexual violence during their life time. On the other hand, more than half 68.8% of women without disability experienced psychological violence during their life time. Regarding incidence rate of psychological violence, 64% of

women with disability experienced psychological violence. On the contrary, 37% of WWOD were experienced psychological violence during the last 12 months.

Concerning the composite result of GBV, 84.1% of WWDs and 76.48% of WWODs reported their experience of at least one element of GBV in their life. Similarly, 76.56% of WWDs and 60% of WWODs experienced during the last twelve months.

The finding also revealed that WWD were more vulnerable for physical, sexual and psychological violence than WWOD. For instance, WWD were 1.3 times more vulnerable for sexual violence during their life time than WWOD counter parts. In addition, WWD were 1.08 times more exposed for psychological violence during the last twelve months than WWOD counterparts. WWD were also 1.19 times more vulnerable for physical violence during their life time than WWOD. The total aggregate result of GBV also revealed that WWD were 1.1 times more vulnerable for life time GBV and 1.28 times more vulnerable for the last 12 months than WWODs. However, WWD and WWOD had almost the same incidence rate of sexual violence.

Thus, all these findings confirmed the severity of GBV. Furthermore, WWD were more vulnerable for GBV than WWOD for the physical, sexual and psychological violence and for both life time and incidence rate.

4.3 GBV among Women Living with Visual, Hearing and Physical Disabilities

The other major objective of this study was to determine the incidence and prevalence rates of GBV among women living with visual, hearing and physical disabilities and compare with women without disabilities in Addis Ababa. As illustrated in *Table 9*, the life time prevalence and incident rate of physical, sexual and psychological violence among women with visual, hearing, physical disabilities and women without disabilities were presented. The finding

revealed that 66.7%, 65.3%, 59% women with hearing, visual and physical disabilities experienced physical violence respectively during their lifetime. The finding revealed that more than half of women with visual, hearing and physical disabilities experienced physical violence during their life time. Compared with these three groups, almost half of the women without disabilities experienced physical violence. This indicated that WWD experienced physical violence more than WWOD.

Regarding incidence rate of physical violence, 45.5%, 40% and 35.3% women living with visual, physical, hearing disabilities respectively experienced the problem for the last twelve months. On the other hand, 34.2% of WWOD experienced physical violence during the last twelve months. Here also women living with the three disabilities experienced physical violence slightly higher than women without disabilities.

Table 9

Prevalence and Incidence Rates of Physical, Sexual and Psychological Violence

Type of disability	Physical Violence		Sexual Violence		Psychological Violence		Composite	
	Ever (%)	Current (%)	Ever (%)	Current (%)	Ever (%)	Current (%)	Ever (%)	Current (%)
Women with Visual disabilities	65.3	45.5	74.25	61.4	80.1	76.3	88.12	72.27
Women with Hearing Disabilities	66.7	35.3	60.8	45.1	72.5	57.8	82	66
Women with Physical disabilities	59	40	72	48	74	51	78	64
Women without disabilities	53.5	34	51.8	43	68.8	37.1	76.48	60

As illustrated in *Table 9*, majority of WWD experienced sexual violence than WWODs. Like that of physical violence, finding revealed that more than half of women with visual, hearing and physical disabilities experienced sexual violence during their life time. Compared with these three groups, half of WWODs were experienced sexual violence during their life time. The finding also confirmed that sexual violence is a serious problem for the last twelve months

too. As indicated in *Table 9* more than half of women with visual disabilities experienced sexual violence during the last twelve months. In addition, almost half of women living with hearing and physical disabilities experienced sexual violence during the last twelve months. Almost comparable results with hearing and physical disabilities were reported by women without disabilities. Even though sexual violence was common for both people with and without disabilities, the problem tends more serious for people with disabilities for both prevalence as well as incident rate of sexual violence.

Compared with the three types of violence, higher prevalence score was recorded for psychological violence among WWD. Accordingly, 80.1%, 74% and 72.5% of women with visual, physical and hearing disabilities respectively had experienced psychological violence during their life time. In addition, 68.8% of women without disabilities reported their experience of psychological violence during their life time. Regarding incidence rate of psychological violence, 76.3%, 57.8% and 51% of women with physical, hearing and physical disabilities respectively reported their experience of psychological violence during the last twelve months. Concerning women without disabilities, 37.1% of them reported their experience of psychological violence during the specified time.

Furthermore, composite results of GBV across women living with visual, hearing and physical disabilities were computed. Accordingly, 88.12%, 82% and 78% women living with visual, hearing and physical disabilities respectively experienced at least one element of GBV during their life time. Likewise, 72.27%, 66% and 64% of women living with visual, hearing and physical disabilities experienced at least one of physical, sexual and psychological violence

during the last twelve months. The findings also revealed that WWODs the aggregate prevalence and incidence rate of GBV was relatively lower than WWDs.

In addition, the finding revealed that psychological violence is a serious problem even more than physical and sexual violence among women living with disabilities. In addition, like that of physical and sexual violence, people with disabilities also experienced psychological violence more than WWOD for both prevalence and incident rates.

To sum up, in all the three types of violence (physical, sexual and psychological) there were slight variation among women with visual, hearing and physical disabilities in relation to prevalence and incident rate of these violence. However, there were huge gaps between WWD as a whole and WWOD in both prevalence and incident rate of physical, sexual and psychological violence. This clearly confirmed that women with disabilities were more exposed for the three types of violence more than women without disabilities.

4.4 Independent Existence and Overlap among Physical, Sexual and Psychological Violence

The collected data about GBV was analyzed to identify the interrelation between physical, sexual and psychological violence among women with and without disability. As indicated in Figure 5, the most common violence in relation to life time prevalence rate, 225(74.25%) psychological, 205(67.65%) sexual and 193(63.69%) physical violence among women with disabilities who experienced GBV.

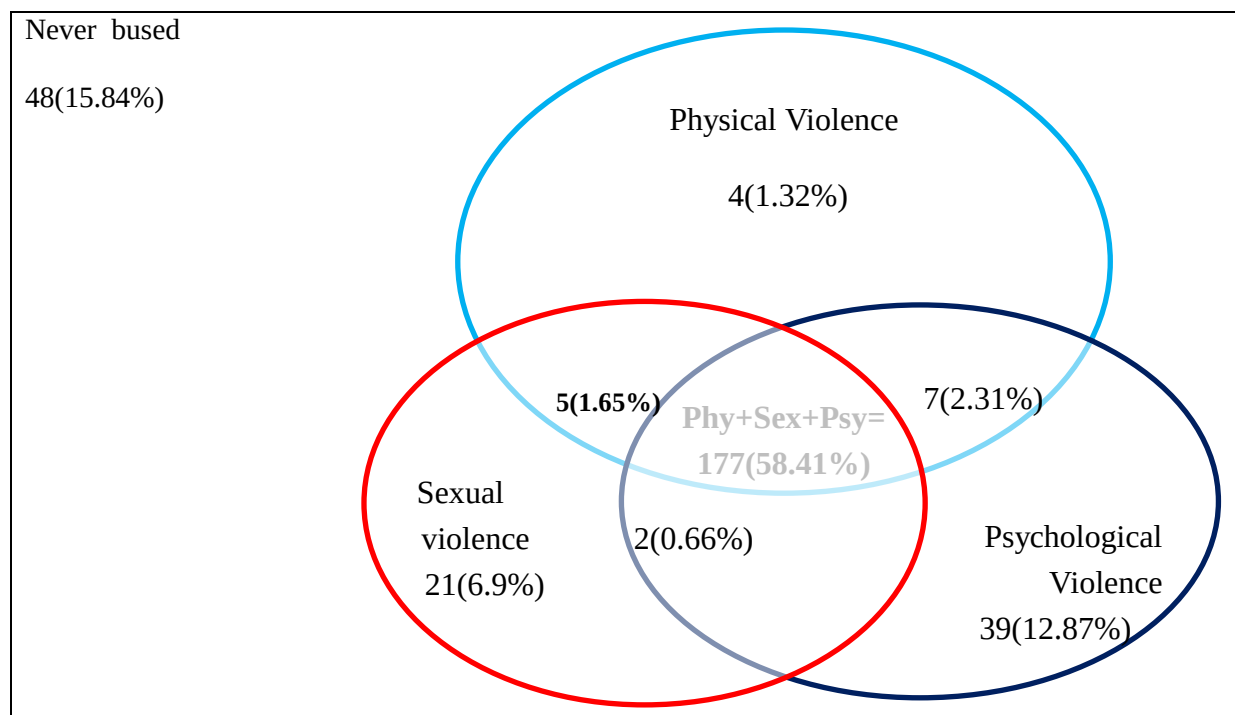


Figure 5: Overlaps between the life time prevalence of physical, sexual and psychological violence among WWD

As far as the patterns of occurrence of the three types of violence was concerned, physical violence 4(1.32%) was less likely to occur in isolated form compared with psychological and sexual violence which accounts 39(12.87%) and 21(6.9%) respectively for each of isolated occurrence. Regarding the joint occurrences, physical violence and psychological violence account 7(2.31%). It exceeds the other two overlapping patterns of 4(1.32%) and 2(0.66%) for physical violence plus sexual violence and sexual violence plus psychological violence.

In addition, the obtained data about GBV for the last twelve months was analyzed to identify the interrelation between physical, sexual and psychological violence among WWD. As indicated in *Figure 6*, the most common violence in relation to incidence rate out of 303 WWD

195(64.35%) psychological, 127(41.9%) physical and 126(41.58%) sexual violence among WWD who experienced GBV.

Regarding, the patterns of occurrence of the three types of violence was concerned, sexual violence 14(4.62%) was less likely to occur in isolated form compared with psychological and physical violence which accounts 49(16.17) and 19(6.27%) respectively for each of isolated occurrence. Regarding the joint occurrences, sexual violence and psychological violence account 42(13.86%) it surpasses the other two overlapping patterns of 38(12.54%) and 4(1.32%) for physical violence plus psychological violence and sexual violence plus physical violence.

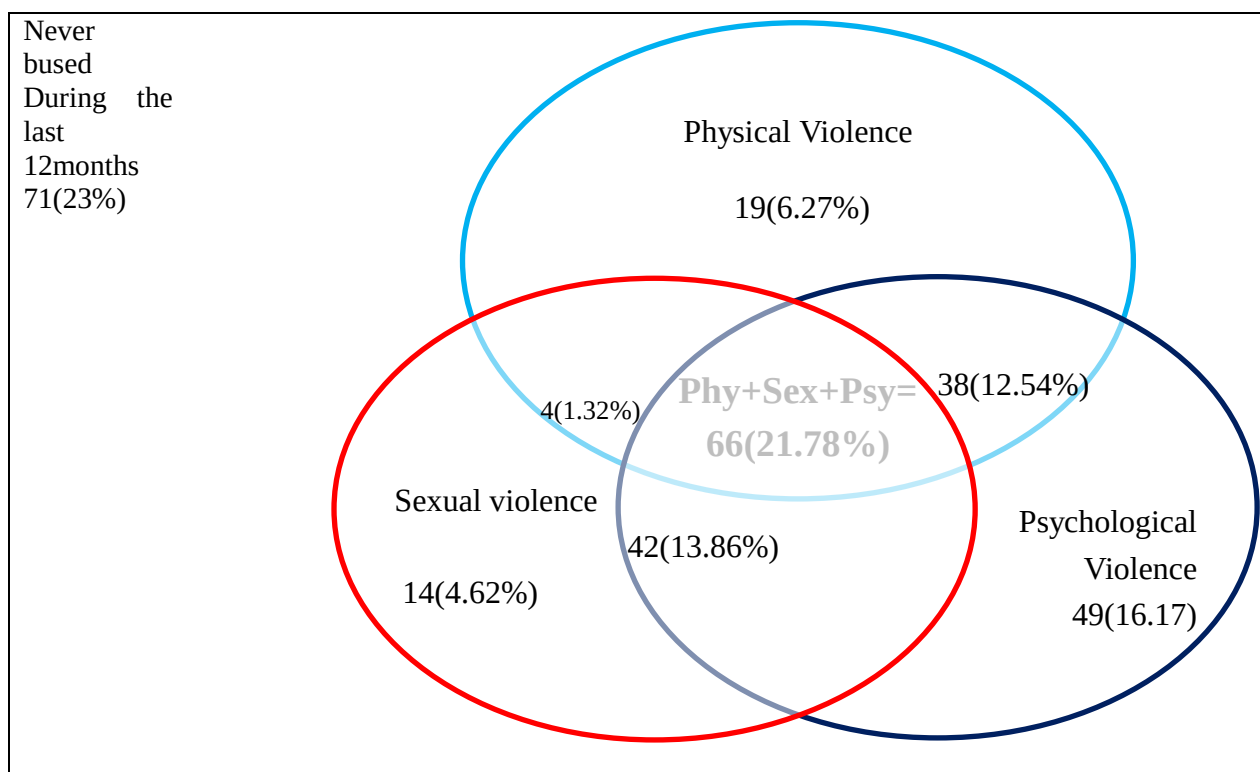


Figure 6: Overlaps between the incidence rate of physical, sexual and psychological violence among WWD

Regarding the rate or patterns of occurrence of physical, sexual and psychological violence, significant number of WWD experienced the three types of violence during their life

time. Accordingly, 117(68.82%), 91(53.5%) and 88(51.76%) of the participants were experienced psychological, physical and sexual violence respectively.

In relation to patterns of occurrence of the three types of violence among WWODs was concerned, physical violence less likely to occur in isolated form 5(2.94%) when compared with psychological and sexual violence which accounts 20(11.7%) and 7(4%) for each of isolated occurrence respectively. Regarding the joint occurrences, physical violence and psychological violence account 17(10%). It exceeds the other two overlapping patterns of 12(7.05%) and 1(0.58%) for psychological plus sexual violence and physical violence plus sexual violence respectively.

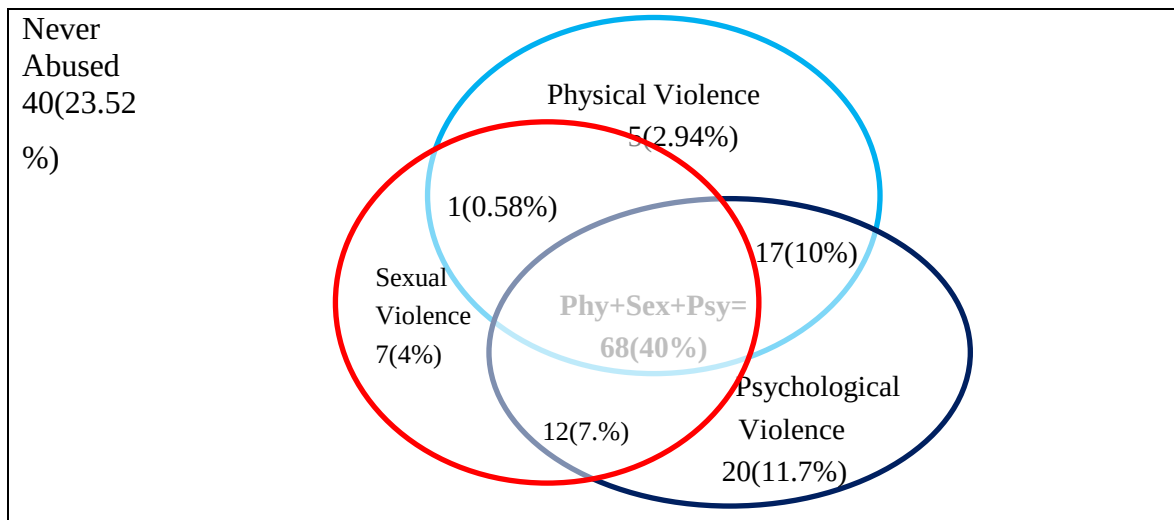


Figure 7: Overlaps between the life time prevalence of physical, sexual and psychological violence among WWOD

Finally, patterns of occurrences of the three violence during the last twelve months for WWODs were computed. As indicated in *Figure 8*, sexual violence 73(42.94%), psychological violence 63(37.1%) and physical violence 58(34.11%) were from the most common to the least

common violence for the last 12 months among WWODs. This implies that now a days sexual violence becomes serious problem among WWOD in Addis Ababa.

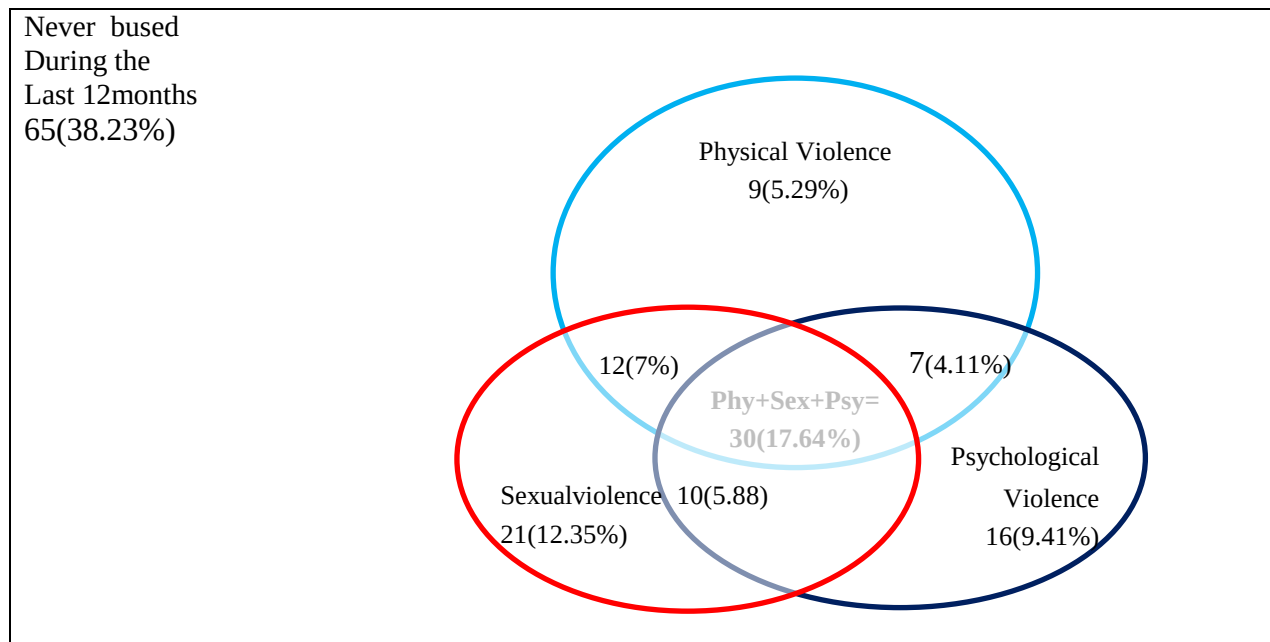


Figure 8: Overlaps between incidence rate of physical, sexual and psychological violence among WWOD

Regarding, the patterns of occurrence of the three types of violence was concerned, physical violence 9(5.29%) was less likely to occur in isolated form compared with psychological and sexual violence which accounts 16(9.41%) and 21(12.35%) respectively for each of isolated occurrence. Regarding the joint occurrences, physical violence and sexual violence account 12(7%). It exceeds the other two overlapping patterns of 10(5.88) and 7(4.11%) for sexual versus psychological violence and psychological versus physical violence.

As indicated in *Figures 5-8* psychological violence was the most commonly observed problem both by WWD and WWOD who experienced during their life time and for the last twelve months. For women with disabilities, sexual violence was the second mostly observed

problem followed by physical violence. On the other hand, for WWOD physical violence was the second most observed problem followed by sexual violence. However, the incidence rate of sexual violence becomes serious problem among WWOD.

4.5. Mental Health Status among WWD and WWOD

In this section, the level of the dependent variables (depression, anxiety, PTSD, and self-esteem) among WWD and WWOD were presented.

4.5.1 Depression

Depression level among WWD and WWOD who experienced and did not experience GBV were assessed and the findings are presented in *Table 10*. As indicated in the same Table, WWD who experienced GBV throughout their life, 31.76 % (M= 22.46, SD=1.96) of them qualify for severe depression, 23.9% (M=17.36, SD=1.37) moderately severe depression and 21.56% (M=11.9, SD=1.41) moderate depression. On the other hand, WWD who didn't experience GBV revealed relatively low level of depression. The finding revealed that out of the total 48 WWD who did not experienced at least one element of GBV, 33.3% (M=7.06, SD=1.7) of them develop mild depression followed 25% (M=10.83, SD=1.52) for moderate depression and 22.9% (M=16.36, SD=1.4) moderately severe depression and 4.16% (M=23.5, SD=4.94) participants develop severe depression.

Table10

Depression among WWD and WWOD Who Experienced and did not Experience GBV

No	Cut-off point	WWD who experienced GBV N (%)	M(SD)	WWD who didn't experience GBV N (%)	M(SD)	WWOD who experienced GBV N (%)	M(SD)	WWOD who didn't experience GBV N (%)	M(D)
1	0-4	16(6.27)	1.9(1.28)	7(14.58)	2.57(1.39)	16(12.30)	2.5(1.6)	14(35)	2.57(1.55)
2	5-9	42(16.47)	7.5(1.2)	16(33.3)	7.06(1.7)	24(18.46)	7.1(1.68)	20(50)	6(0.9)
3	10-14	55(21.56)	11.9(1.41)	12(25)	10.83(1.52)	18(13.84)	11.05(0.93)	6(15)	11.8(1.7)
4	15-19	61(23.92)	17.36(1.37)	11(22.9)	16.36(1.4)	30(23.07)	17.4(1.4)	-	-
5	20-27	81(31.76)	22.46(1.96)	2(4.16)	23.5(4.94)	42(32.30)	21.4(1.49)	-	-

Key for interpretation- Score 0-4 no depression at all, 5-9 mild depression, 10-14 moderate depression, 15-19 moderate severe depression, and 20-27 severe depression.

WWD= women with disabilities, WWOD=women without disabilities

In addition to women with disabilities, women without disabilities who experienced GBV depression level were also assessed and compared with women who didn't experience the problem. Accordingly, 32.30 % (M=21.4, SD=1.49), 23.07% (M=17.4, SD=1.4) and 13.84% (M=11.05, SD=0.93) qualify the criteria of severe depression, moderately severe depression and moderate depression respectively. On the other hand, WWOD who did not experienced GBV 50% (M=6, SD=0.9), 35 % (M=2.57, SD=1.55) and 15 % (M=11.8, SD=1.7) met the criteria for mild depression, no depression at all and moderate depression respectively. As clearly observed, there was difference on the level of depression between women who experienced and didn't experience GBV. Furthermore, the finding revealed that WWD who didn't experienced GBV met more the criteria for depression than WWOD who did not experienced GBV.

Regarding the level of depression between WWDs and WWODs who experienced GBV throughout their life time, WWD scored slightly higher mean score than WWOD for severe depression, moderate severe depression and moderate depression.

The finding also revealed the level of depression between WWDs and WWODs who did not experience GBV during their life time. Accordingly, higher number of WWD who did not experience GBV met the criteria for severe depression, moderate severe depression and moderate depression than WWOD who did not experience GBV.

To recap, there is difference on the level of depression among women with disabilities who experienced and didn't experience GBV. Similarly, there was also difference among WWOD who experienced and didn't experience GBV on the level of depression. Eventually, WWOD who didn't experience GBV revealed lower level of depression compared with WWD who didn't experience GBV.

4.5.2 Anxiety

In this sub-section, the association between GBV and level of state and trait anxiety was analyzed and presented. The interpretation of the finding implies that the higher the score indicate the severe the level of anxiety. The cut-off point was determined based on the mean score 47.66 (SD=8.81) for STAI-S. The upper and lower boundaries were determined by adding and subtracting standard deviation on the mean score. Accordingly, 39 and 56 become the lower and upper boundaries respectively. By using similar method for STAI-T the mean score 48.31(SD=7.08,) was calculated. Then, 41 and 55 became the lower and upper boundaries respectively. Accordingly, the levels of anxiety among women with and without disabilities who experienced and did not experience GBV were also reported.

As indicated in *Table11*, for STAI-S almost more than half of WWD who experienced GBV 159 (62.35%, M=48.7, SD=4.94) and one fourth of them, 66 (25.88 %, M=62.5, SD=3.15) met the criteria for moderate anxiety and high anxiety level respectively. On the other hand, out

of the total 48 WWD who did not experience GBV more than half of 28 (58.3%, M=45.96, SD=3.5) them and only 3(6.25%, M=60, SD=3.6) them met the criteria for moderate anxiety and severe anxiety level respectively.

Regarding the level of anxiety among WWOD, out of the total 130 WWOD who experienced GBV, majority 103(79.23 %, M=46.75, SD= 3.84) and 7(5.38 %, M=60.5, SD=2.64) met the criteria for moderate anxiety and sever anxiety respectively. Contrary to these findings, out of the total 40 WWOD who did not experienced GBV, 29(72.5%, M=40, SD=3) and 1(2.5 %, M=59) met the criteria for moderate anxiety and severe anxiety level respectively.

Table 11

State-Anxiety among WWD and WWOD Who Experienced and didn't Experience GBV

State anxiety	Cut-off point	WWD who experienced GBV		WWD who didn't experience GBV		WWOD who experienced GBV		WWOD who didn't experience GBV	
		N (%)	M(SD)	N (%)	M(SD)	N (%)	M(SD)	N (%)	M(D)
STAI-S	≤39	30(11.76)	35.4(3.68)	17 (35.41)	34.58(3.6)	20 (15.38)	35.55(4.32)	10(25)	34.1(5.3)
	40≤56	159(62.35)	48.7(4.94)	28 (58.3)	45.96(3.5)	103(79.23)	46.75(3.84)	29(72.5)	40(3)
	> 56	66(25.88)	62.5(3.15)	3 (6.25)	60(3.6)	7(5.38)	60.5(2.64)	1(2.5)	59

Key: For STAI-S,>56 severe anxiety level, 40-56 moderate anxiety level and ≤39 low anxiety level.

The finding also confirmed that more number of WWD who experienced GBV met the criteria for severe anxiety level than WWOD who experienced GBV. However, more number of WWOD who experienced GBV met the criteria for moderate state anxiety level than WWD who experienced GBV. Generally, both WWD and WWOD who experienced revealed higher mean score for STAI-T than WWD and WWOD who did not experienced GBV.

Table 12

Trait-Anxiety among WWD and WWOD Who Experienced and Didn't Experience GBV

Scale	Cut-off point	WWD who experienced GBV		WWD who didn't experience GBV		WWOD who experienced GBV		WWOD who didn't experience GBV	
		N (%)	M(SD)	N (%)	M(SD)	N (%)	M(SD)	N (%)	M(D)
STAI-T	≤41	37(14.5)	37.2(2.8)	16(33)	35.66(3.2)	17(13.07)	37.6(2.6)	9(22.5)	36.5(2.3)
	42-55	171(67.05)	49(3.6)	21(43.75)	48.38(3.5)	96(73.8)	49(3.3)	30(75)	47.5(2.96)
	> 55	47(18.43)	58.7(2.5)	11(22.9)	61.(3)	17(13.07)	57(1.15)	1(2.5)	56

Key: For STAI-T, >55 severe anxiety level, 42-55 moderate anxiety level and ≤41 low anxiety level.

Regarding trait-anxiety among WWD and WWOD who experienced and did not experience GBV was presented. As indicated in *Table 12*, more than half of WWD who experienced GBV, 171(67%, M=49, SD= 3.6) and, 47(18.43%, M=58.7, SD=2.5) met the criteria for moderate anxiety and severe anxiety level respectively. On the other hand, WWD who did not experience GBV revealed, 21(43.75%, M=48, SD=3.5) and 11(22.9%, M=61, SD=3) met the criteria for moderate anxiety and severe anxiety for STAI-T respectively. The finding revealed that the two groups shown almost balanced mean score for moderate anxiety. However, WWD who did not experience GBV scored relatively higher mean score for severe anxiety than WWD who experienced GBV.

Regarding WWOD who experienced GBV, 96(73.8%, M=49, SD=3.3) and 17(13.07%, M=57, SD=1.15) met the criteria for moderate anxiety and severe anxiety respectively. WWOD who did not experienced GBV on the other hand, revealed 30(75%, M=47.5, SD=2.96) and 1(2.5%, M=56) met the criteria for moderate anxiety and severe anxiety level respectively. The findings tend to WWOD who experienced GBV revealed relatively higher mean score than WWOD who did not experience GBV. In addition, WWD who experienced GBV revealed

slightly higher mean score for severe anxiety than WWOD who experienced GBV. However they revealed almost balanced mean score for moderate anxiety.

4.5.3 PTSD

In this section, the level of PTSD among WWD and WWOD who experienced and did not experience GBV was assessed and presented. As indicated in *Table 13* out of the total WWD who experienced GBV, 60.78% (M=55, SD=6.21) met the diagnostic criteria for PCL-C. On the contrary, out of the total WWD who did not experience GBV only 10.41% (M=53.2, SD=7.22) met the diagnostic criteria for the same instrument. Regarding WWOD who experienced GBV, out of the total 130 women 48.46% (M=55.07, SD=6.31) met the diagnostic criteria for PCL-C compared with 2.5 % (M=47) for WWOD who did not experienced GBV.

Table13

PTSD among WWD and WWOD Who Experienced and didn't Experience GBV

NQ	Cut-off Points	WWD who experienced GBV		WWD who didn't experience GBV		WWOD who Experienced GBV		WWOD who didn't experience GBV	
		N (%)	M(SD)	N (%)	M(SD)	N (%)	M(SD)	N (%)	M(SD)
1	≥44	155(60.78)	55.06(6.21)	5(10.41)	53.2(7.22)	63(48.46)	55.07(6.31)	1(2.5)	47
2	<44	100(39.21)	34.37(5.66)	43(89.58)	30.65(4.92)	67(51.53)	34.08(5.8)	39(97.5)	30.33(5.4)

Key: ≥44 met the criteria for PTSD, <44 not met the criteria for PTSD

The finding also revealed that WWD who experienced GBV exposed for PTSD than WWOD who experienced GBV. Similarly, WWD who did not experience GBV were more vulnerable for PTSD than WWOD who did not experience GBV.

4.5.4 Self-Esteem

The self-esteem of women with and without disabilities that experienced and didn't experience GBV was presented in *Table 14*. There was difference on the level of self-esteem

between women with disabilities who experienced and who didn't experience GBV (physical, sexual and psychological) during their life time. The result confirmed that out of the total women with disabilities who experienced GBV 255, 50% (M=11.85, SD=2.18) scored low self-esteem. On the contrary, 25% (M=10.25, SD=2.17) of women with disabilities who didn't experience GBV scored low self-esteem.

Table 14

Self-esteem among WWD and WWOD Who Experienced and did not Experience GBV

Cut-off points	WWD who experienced GBV		WWD who didn't experience GBV		Women WWOD who experienced GBV		WWOD who didn't experience GBV	
	N (%)	M(SD)	N (%)	M(SD)	N (%)	M(SD)	N (%)	M(SD)
<15	128(50.19)	11.85(2.18)	12(25)	10.25(2.17)	31(23.84)	11.41(2.57)	4(10%)	13(1.15)
15-25	124(48.62)	19.29(2.98)	32(66.66%)	18.62(3.09)	98(75.38)	19.35(3.3)	30(75)	18.03(3.06)
>25	3(1.17)	27.66(1.52)	4(8.33%)	27.5(1.29)	1(0.76)	27	6(15%)	27(1.09)

Key: <15 low self-esteem, 15-25 normal self-esteem and > 25 high self-esteem

Similarly, out of the total 130 WWOD who experienced GBV, 23.84% (M=11.41, SD=2.57) scored lower self-esteem and only 10 % (M=13, SD=1.15) WWOD who didn't experience GBV scored low self-esteem. In other words both WWD and WWOD who did not experience GBV had relatively higher self-esteem than women who experienced GBV. From the two groups who experienced GBV, higher proportion of WWD scored lower self-esteem than WWOD. Such difference implies that WWDs self-esteem can be also threatened by other factors such as living with disability. Therefore, it needs further investigation in the area.

4.6 Association of GBV and Mental Health and self-esteem across other Variables

The associations of GBV with mental health problems among the study participants were analyzed using MANOVA. The remaining parts of the result were analyzed in four parts by using MANOVA. Primarily, the levels of mental health across some selected demographic characteristics were analyzed. Next, mental health problems between WWD and WWOD who

experienced GBV were analyzed and presented. Then after, mental health problems between women with disability who experienced and did not experience were reported. Based on the final research question, GBV and mental health problems among women living with visual, hearing and physical disabilities were analyzed and presented at the end of this chapter. For this purpose, the basic assumptions of MANOVA were computed.

4.7 The Association of GBV, Mental Health and Some Selected Demographic Variables

One of the major purposes of this study was to investigate the association between GBV and mental health problems and self-esteem among WWD who experienced GBV. The four scales of the mental health problems (i.e., depression, PTSD, state-anxiety, and trait-anxiety) and also self-esteem were computed between groups of the selected dependent variables using one-way multivariate analysis of variance (MANOVA). The independent variable in this analysis was age of the participants who experienced GBV that categorized into four groups. The set of dependent variables consisted of five variables: depression, state-anxiety, trait-anxiety, PTSD and self-esteem. The descriptive statistics of GBV assessment result was presented in *Table 16*. In this part mental health status and self-esteem of WWDs who experienced GBV across age, marital status and husband's or partner's alcohol use were presented.

4.7.1 Mental Health Problems across Age of WWD Who Experienced GBV

Table 16

Result from Descriptive Statistics for Dependent Variables across Participants' Age

Dependent Variable	Age	Descriptive statistics		
		Women with disability		
		Mean	SD	N
PHQ9	15-24	13.25	7.18	83
	25-34	15.69	5.83	109
	35-44	17.18	6.68	53
	45 and above	16.10	5.30	10
STAI5	15-24	50.54	10.08	83
	25-34	50.63	8.31	109
	35-44	49.67	9.44	53
	45 and above	50.20	7.56	10
STAIT	15-24	48.54	7.30	83
	25-34	49.76	6.42	109
	35-44	48.03	7.07	53
	45 and above	48.40	9.90	10
PTSD	15-24	46.33	10.12	83
	25-34	48.55	11.61	109
	35-44	48.45	8.908	53
	45 and above	51.40	9.167	10
Self-esteem	15-24	16.49	5.166	83
	25-34	15.49	4.400	109
	35-44	14.86	4.85	53
	45 and above	14.70	1.82	10

As indicated above, preliminary assumption testing was conducted to check for normality, linearity, homogeneity of variance-covariance matrices, and multicollinearity, with no serious violation noted.

A one-way MANOVA was performed to investigate differences in mental health problems (depression, state-anxiety, trait-anxiety and PTSD) and self-esteem among four age groups of the study participants of WWD who experienced GBV.

Table 17

MANOVA Result on Association of Mental Health Problem across Age of WWD

Multivariate Tests									
	Effect	Value	F	Hypothes is df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observe d Power
Intercept	Pillai's Trace	.977	2134.762	5.000	247.000	.000	.977	10673.808	1.000
	Wilks' Lambda	.023	2134.762	5.000	247.000	.000	.977	10673.808	1.000
	Hotelling's Trace	43.214	2134.762	5.000	247.000	.000	.977	10673.808	1.000
	Roy'sLargest Root	43.214	2134.762	5.000	247.000	.000	.977	10673.808	1.000
Age of WWD	Pillai's Trace	.093	1.592	15.000	747.000	.070	.031	23.880	.898
	Wilks' Lambda	.908	1.609	15.000	682.260	.066	.031	22.183	.869
	Hotelling's Trace	.099	1.625	15.000	737.000	.062	.032	24.371	.906
	Roy's Largest Root	.081	4.042	5.000	249.000	.002	.075	20.211	.950

$P < 0.05$

As indicated in Table 17, the result revealed that there was no statistically significant multivariate main effect for mental health problems and self-esteem between age categories for WWD who experienced GBV on the combined dependent variables $F(15, 682.260) = 1.609$, $p = .066$; Wilks' Lambda = .908; partial eta squared = .031. Power to detect the effect was 0.869.

4.7.2 Mental Health Problems and Self-esteem across Marital-Status of WWD Who Experienced GBV

Table 18

Descriptive Statistics for Dependent Variables across Participant' Marital Status

Dependent Variable	Marital status	Descriptive Statistics		
		Mean	SD	N
PHQ9	Never married	12.8632	6.32852	117
	Married	16.8557	6.60648	97
	Divorced	18.1220	4.88464	41
STAI S	Never married	49.0769	9.93787	117
	Married	52.1340	8.09144	97
	Divorced	50.0000	8.28855	41
STAI T	Never married	48.6410	7.43415	117
	Married	49.2165	7.09199	97
	Divorced	49.2195	5.45670	41
PTSD	Never married	45.4017	10.9016	117
	Married	50.3402	10.0756	97
	Divorced	49.3902	9.12655	41
Self-esteem	Never married	17.3932	4.79396	117
	Married	14.6907	4.39782	97
	Divorced	13.0000	3.09031	41

A one-way MANOVA was performed to investigate differences in mental health problems (depression, state-anxiety, trait-anxiety and PTSD) and also self-esteem among WWD who were never married, married and divorced women who experienced GBV. As indicated in *Table 19*, the result revealed that there was statistically significant difference in multivariate main effect for mental health problems among WWD who never married, married and divorced women and experienced GBV on the combined dependent variables $F(10, 496.000) = 6.322, p = .000$; Wilk's Lambda = .787; partial eta squared = .113. Power to detect the effect was 1.000.

Table 19

MANOVA Result on the Comparison of Mental Health Problem across Marital Status of WWD

Effect	Value	F	Multivariate Tests		Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power
			Hypothesis df	Error df				
Intercept	Pillai's Trace	.988	3930.818	5.000	.000	.988	19654.09	1.000
	Wilks' Lambda	.012	3930.818	5.000	.000	.988	19654.09	1.000
	Hotelling's Trace	79.250	3930.818	5.000	.000	.988	19654.09	1.000
	Roy's Largest Root	79.250	3930.818	5.000	.000	.988	19654.09	1.000
Marital status of WWD	Pillai's Trace	.219	6.116	10.000	.000	.109	61.161	1.000
	Wilks' Lambda	.787	6.322	496.000	.000	.113	63.219	1.000
	Hotelling's Trace	.264	6.527	494.000	.000	.117	65.269	1.000
	Roy's Largest Root	.235	11.693	5.000	.000	.190	58.464	1.000

$P < 0.01$

Since there was a statistically significant result for MANOVA analysis, each dependent variable analyzed separately using univariate ANOVA. The result indicated that there was statistically significant difference among the three groups for depression, PTSD and self-esteem, but not for state-anxiety and trait-anxiety at $P < 0.01$. The univariate ANOVA result and the subsequent post-hoc multiple comparisons were presented in *Table 20 and 21*.

Table 20

Result for Univariate ANOVA for Mental Health Status and Self-Esteem across Marital Status

Dependent Variable	Source	Tests of Between-Subjects Effects				Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power
		Type III Sum of Squares	df	Mean Square	F				
Depression	Corrected Model	1254.626	2	627.313	16.147	.000	.114	32.294	1.000
	Intercept	52923.292	1	52923.292	1362.24	.000	.844	1362.249	1.000
	Marital status	1254.626	2	627.313	16.147	.000	.114	32.294	1.000
State anxiety	Corrected Model	502.999	2	251.500	3.093	.047	.024	6.186	.593
	Intercept	528707.137	1	528707.13	6502.539	.000	.963	6502.53	1.000
	Marital status	502.999	2	251.500	3.093	.047	.024	6.186	.593
Trait anxiety	Corrected Model	21.034	2	10.517	.213	.808	.002	.426	.083
	Intercept	500193.961	1	500193.96	10140.37	.000	.976	10140.3	1.000
	Marital status	21.034	2	10.517	.213	.808	.002	.426	.083
PTSD	Corrected Model	1398.782	2	699.391	6.561	.002	.049	13.122	.907
	Intercept	487052.79	1	487052.79	4568.89	.000	.948	4568.89	1.000
	Marital status	1398.782	2	699.391	6.561	.002	.049	13.122	.907
Self-esteem	Corrected Model	732.681	2	366.341	18.823	.000	.130	37.645	1.000
	Intercept	46999.298	1	46999.29	2414.82	.000	.906	2414.82	1.000
	Marital status	732.681	2	366.341	18.823	.000	.130	37.645	1.000

P < 0.01

Depression-Univariate between groups ANOVA was conducted to explore the impact of marital status on the level of depression, as measured by the PHQ-9 test. As indicated in *Table 20*, subjects were divided in to three groups according to their marital status (never married, married and divorced). There was statistically significant main effect for marital status [$F(2, 252) = 16.147, p = .000$]. The effect size was large (eta squared = 0.114). As indicated in *Table 21*, the post-hoc comparison using the Tukey HSD test revealed that depression mean score by WWD who never married ($M = 12.86, SD = 6.33$) was significantly different from married women ($M = 16.85, SD = 6.606$) and divorced ($M = 18.122, SD = 4.88$). However, there was no statically significant difference between married and divorced WWD for depression mean score.

Table 21

Univariate Post-Hoc Comparison of Depression, PTSD and Self-Esteem across Marital Status

Multiple Comparisons										
Dependent Variable: Depression , Tukey HSD					Dependent Variable: PTSD Tukey HSD			Dependent Variable: Self-esteem Tukey HSD		
	(J) marital status	Mean Difference (I-J)	Std. Error	Sig.	Mean Difference(I-J)	Std. Error	Sig.	Mean Difference(I-J)	Std. Error	Sig.
Never married	Married	-3.992*	.855	.000	-4.938*	1.417	.002	2.7024*	.60580	.000
	Divorced	-5.258*	1.13	.000	-3.988	1.873	.086	4.3932*	.80066	.000
Married	Never married	3.9924*	.85	.000	4.938*	1.417	.002	-2.7024*	.60580	.000
	Divorced	-1.2663	1.16	.521	.9500	1.923	.874	1.6907	.82180	.101
Divorced	Never married	5.2587*	1.13	.000	3.9885	1.873	.086	-4.3932*	.80066	.000
	married	1.2663	1.10	.521	-.9500	1.923	.874	-1.6907	.82180	.101

* The mean difference is significant at the .01 level.

PTSD-univariate between groups ANOVA was also conducted to explore the impact of marital status on the level of PTSD for never married, married and divorced WWDs. As indicated in *Table 20*, there was statistically significant main effect for marital status [$F(2, 252) = 6.561$, $p = .002$]. The effect size was nearly moderate ($\eta^2 = .049$). As indicated in *Table 21*, the post-hoc comparison using Tukey HSD test revealed that PTSD mean score by WWD who never married ($M = 12.86$, $SD = 6.33$) was significantly different from married women ($M = 16.85$, $SD = 6.606$). However, there was no statistically significant difference between married and divorced as well as divorced and never married WWDs for PTSD mean score.

State-anxiety and trait-anxiety-univariate between groups ANOVA was also conducted to explore the impact of marital status on the level of anxiety, as measured by the STAI for never married, married and divorced WWDs. For state-anxiety there was no statistically significant

main effect for marital status [$F(2, 252) = 3.093, p=.047$]. The effect size was nearly small ($\eta^2 = .024$). Similarly, for trait-anxiety, there was also no statistically significant difference in main effect for marital status [$F(2, 252) = .213, p=.808$]. The effect size was very small ($\eta^2 = .002$).

Self-esteem- As indicated in *Table 20*, univariate between groups ANOVA was finally conducted to explore the impact of marital status on the level of self-esteem for never married, married and divorced WWDs. There was statistically significant main effect for marital status [$F(2, 252) = 18.823, p=.000$]. The effect size was very high ($\eta^2 = .130$). As indicated in *Table 21*, the post-hoc comparison using Tukey HSD test among WWDs revealed that there was statistically significant difference between never married ($M=17.3932, SD= 4.79$) and married women ($M=14.69, SD=4.39$). There was also statistical significant difference between never married ($M=17.3932, SD= 4.79$) and divorced women ($M=13.00, SD=3.09$). However, there was no statistically significant difference for self-esteem among never married and married women.

4.7.3 Partner Alcohol Abuse and WWDs Mental Health Status

The association of partner alcohol abuse and victims mental health status was assessed by using MANOVA. Out of the total 255 WWD who experienced GBV 119(46%) reported that their husband/partners' harmful use of alcohol.

Table 22

Descriptive statistics for partner harmful use of alcohol and WWDs mental health and self-esteem

		WWD		
Husband/partner alcohol abuse		Mean	Std. Devi.	N
Depression	Yes	16.70	7.01	119
	No	13.93	5.93	136
STAI S	Yes	51.05	9.67	119
	No	49.80	8.54	136
STAI T	Yes	49.53	7.14	119
	No	48.44	6.86	136
PTSD	Yes	50.18	9.81	119
	No	45.94	10.80	136
Self-esteem	Yes	14.53	4.13	119
	No	16.63	4.97	136

A one-way MANOVA was performed to investigate differences in mental health problems (depression, state-anxiety, trait-anxiety and PTSD) and self-esteem for WWD who have partner/husband that abuse alcohol and did not abuse alcohol. The result revealed that there was statistically significant multivariate main effect for mental health problems and self-esteem between the two groups on the combined dependent variables $F(5, 249) = 3.781, p=.003$; Wilk's Lambda=.929; partial eta squared=.071. Power to detect the effect was 0.934.

Table 23

MANOVA Result for partner harmful use of alcohol and WWDs' mental health and self-esteem

		Multivariate Tests							
Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power
Intercept	Pillai's Trace	.990	4749.220	5.000	249.000	.000	.990		1.000
	Wilks' Lambda	.010	4749.220	5.000	249.000	.000	.990	23746.100	1.000
	Hotelling's Trace	95.366	4749.220	5.000	249.000	.000	.990	23746.100	1.000
	Roy's Largest Root	95.366	4749.220	5.000	249.000	.000	.990	23746.100	1.000
Partner alcohol Abuse	Pillai's Trace	.071	3.781	5.000	249.000	.003	.071	18.906	.934
	Wilks' Lambda	.929	3.781	5.000	249.000	.003	.071	18.906	.934
	Hotelling's Trace	.076	3.781	5.000	249.000	.003	.071	18.906	.934
	Roy's Largest Root	.076	3.781	5.000	249.000	.003	.071	18.906	.934

P<0.01

Based on the result from MANOVA, each dependent variable was analyzed separately using independent sample t-test to determine the level of mental health and self-esteem for the two groups.

Table 24

Independent sample t-test result for partner alcohol Abuse and WWDs mental health and self-esteem

		Independent sample t-test				
Variable	Partner alcohol abuse	Mean	Sta.Dev.	t	Sig. (2-tailed)	df
Depression	Yes	16.70	7.01	3.381*	0.001	253
	No	13.93	5.93			
State-anxiety	Yes	51.05	9.67	1.079	0.281	253
	No	49.80	8.54			
Trait-anxiety	Yes	49.53	7.14	1.249	0.213	253
	No	48.44	6.86			
PTSD	Yes	50.18	9.81	3.265*	.001	253
	No	45.94	10.8			
Self-esteem	Yes	14.53	4.13	-3.684*	.000	253
	No	16.63	4.97			

P<0.01

An independent sample t-test was conducted to compare the five dependent variables (depression, state-anxiety, trait-anxiety, PTSD and self-esteem) among WWD that their

partner/husband abuse alcohol and did not abuse alcohol. The result revealed that there was statistical significant difference for depression mean score for women whose husbands/partners abuse alcohol ($M=16.70$, $SD=7.01$) and victims whose husbands/partners did not abuse alcohol [$M=13.93$, $SD=5.93$; $t(253)=3.381$, $p=.001$]. The magnitude of the differences in the mean was nearly moderate effect (eta squared is equal to 0.046). That is 4.6% of the variance in depression is explained by the two groups.

The same technique was also used to investigate the mean difference in state-anxiety and trait -anxiety. However, the independent sample t-test result indicated that there was no statistically significant difference for state-anxiety and trait-anxiety between WWDs that their husband/partner abuse and non-abuse alcohol.

In addition, independent sample t-test was computed for PTSD among the two groups. Accordingly, there was statistical significant mean score difference for PTSD mean score between WWD who have alcohol drinker husbands/partners ($M=50.18$, $SD=9.81$) and those women whose husbands/partners did not abuse [$M=45.94$, $SD=10.80$; $t(253)=3.265$, $p=0.001$]. The magnitude of the differences in the mean score was slightly approach to moderate effect (eta squared is equal to 0.040). That is 4% of the variance in PTSD is explained by the two groups.

Finally, independent sample t-test was computed for mean score for self-esteem for WWD whose husbands/partners abuse and did not abuse alcohol. Accordingly, there was statistically significant difference for self-esteem mean score between women who have partner/husband who abuse alcohol ($M=14.53$, $SD=4.13$) and those women whose husbands/partners did not drink [$M=16.63$, $SD=4.97$; $t(253)=-3.684$, $p=0.001$]. The magnitude

of the differences in the mean score was nearly approach to moderate effect (eta squared is equal to 0.050). That is 5% of the variance in self-esteem is explained by the two groups.

4.8 Comparisons of Mental Health Problems and Self-Esteem among WWD and WWOD Who Experienced GBV

One of the major purposes of this study was to investigate whether or not statistically significant difference existed in mental health problems between women with and without disabilities who experienced GBV. The five scales of the mental health problems (i.e., depression, PTSD, state- anxiety and trait-anxiety) and also self-esteem were computed. The comparison was made between the two groups using one-way multivariate analysis of variance (MANOVA). The MANOVA in this analysis had a 2 x 5 design. The independent variable in this analysis was the two independent groups (i.e., women with and without disability who experienced GBV). The set of dependent variables consisted of five variables, depression, state anxiety, trait anxiety, PTSD, and self-esteem. As indicated earlier, preliminary assumption testing was conducted to check for normality, linearity, homogeneity of variance-covariance matrices, and multicollinearity, with no serious violation noted. The descriptive statistics of the GBV assessment result was presented in *Table 25*.

Table 25

Descriptive Statistics for Mental Health Problems between WWD and WWOD Who Experienced GBV

Dependent Variable	Disability Status	Mean	SD	N
Depression	WWD	15.23	6.59	255
Symptom	WWOD	14.10	6.99	130
State- Anxiety	WWD	50.74	8.99	255
	WWOD	50.33	8.27	130
Trait-Anxiety	WWD	48.19	6.56	255
	WWOD	48.43	5.89	130
PTSD	WWD	46.95	11.76	255
	WWOD	44.26	12.14	130
Self-Esteem	WWD	15.66	4.71	255
	WWOD	17.52	4.68	130

As indicated in Table 26, a one-way MANOVA revealed significant multivariate main effect for GBV, $F(5, 379) = 3.344, p < 0.006$; Wilks' Lambda = .958 partial eta squared = .042. Power to detect the effect was .900.

Table 26

MANOVA Result for WWD and WWOD who Experienced GBV

		Multivariate Tests Observed						
Effect		Power Value	F	Hypot hesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter
Intercept	Pillai's Trace	.992	9054.704	5.000	379.000	.000	.992	45273.52
	Wilks' Lambda	.008	9054.704	5.000	379.000	.000	.992	45273.52
	Hotelling's Trace	119.45	9054.704	5.000	379.000	.000	.992	45273.52
	Roy's Largest Root	119.45	9054.704	5.000	379.000	.000	.992	45273.52
WWD & WWOD who experience d GBV	Pillai's Trace	.042	3.344	5.000	379.000	.006	.042	16.722
	Wilks' Lambda	.958	3.344	5.000	379.000	.006	.042	16.722
	Hotelling's Trace	.044	3.344	5.000	379.000	.006	.042	16.722
	Roy's Largest Root	.044	3.344	5.000	379.000	.006	.042	16.722

Based on statistically significant result, each dependent variable was analyzed separately using *independent-samples t-tests* to determine on which of the five dependent variables the groups differed significantly. In order to reduce a chance of Type one error, Bonferroni

technique was applied so as to compute univariate t-tests analysis across the five dependent variables using a criterion p-value of .01 for each test.

Table 27

Result for Independent-Samples t-tests for the Five Dependent Variables among Women who Experienced GBV

Variable	Women who experienced GBV	Mean(SD)	t	Sig.(2-tailed)	df
Depression	WWD	15.22(6.59)	-1.55	.121	383
	WWOD	14(6.99)			
State anxiety	WWD	50.74 (8.98)	-.435	.664	383
	WWOD	50.33 (8.27)			
Trait anxiety	WWD	48.18 (6.55)	.355	.723	383
	WWOD	48.43(5.8)			
PTSD	WWD	46.94 (11.76)	-2.097	.037	383
	WWOD	44.26(12.13)			
Self -esteem	WWD	15.65(4.71)	3.679*	.000	383
	WWOD	17.5231(4.68)			

*P<0.01

An independent sample t-test was conducted to compare the five dependent variables (depression, state anxiety, trait anxiety, PTSD and self-esteem) between women with and without disabilities who experienced GBV. There was no statistical significant difference in depression mean score for women with disabilities who experienced GBV (M=15.22, SD=6.59) and women without disabilities who experienced the problem [M=14, SD=6.99; t (383) = -1.554, p=.121]. The magnitude of the differences in the mean was very small (eta squared is equal to 0.006). That is only 0.6 % of the variance in depression is explained by state of living in disability or not.

As indicated in *Table 27* independent sample t-test was also computed for state-trait anxiety. Accordingly, there was no statistical significant difference in STAI-S mean score

between women with disability ($M=50.74$, $SD=8.98$) and without disability [$M=50.33$, $SD=8.27$; $t(383) = -.435$, $p=.664$] who experienced GBV. The magnitude of the differences in the mean was very small (eta squared is equal to 0.00049). Therefore, there was no significant difference in STAI-S scores between women with and without disability who experienced GBV. Similarly, independent sample t-test was also computed for mean score that was obtained through STAI-Trait anxiety. Thus, there was no statistical significant difference in STAI-Trait anxiety mean score between women with disability ($M=48.18$, $SD=6.55$) and without disability [$M=48.43$, $SD=5.8$; $t(383)=.355$, $p=.723$] who experienced GBV. The magnitude of the differences in mean score was very small (eta squared is equal to 0.0003).

Next, independent sample t-test was computed for mean score for PTSD for women with and without disabilities who experienced GBV. Accordingly, there was no statistically significant difference for mean score for PTSD among women with disability ($M=46.94$, $SD=11.76$) and women without disability [$M=44.26$, $SD=12.13$; $t(383) = -2.097$, $p=.037$] who experienced GBV. The magnitude of the differences in the mean had small effect (eta squared is equal to 0.011).

Finally, independent sample t-test was computed for mean score for self-esteem for women with and without disabilities who experienced GBV. Accordingly, there was statistically significant difference for men score for self-esteem among women with disability ($M= 15.65$, $SD=4.71$) and women without disability [$M=17.5231$, $SD=4.68$]; $t(383) = 3.679$, $p=.000$] who experienced GBV. The magnitude of the differences in the mean was approached to moderate effect (eta squared is equal to 0.034). That is 3.4% of the variance in depression is explained by the two groups.

4.9 Comparisons of Mental Health Problems and Self-Esteem among WWD Who Experienced and did not Experience GBV

The other major purpose of this study was to determine whether or not statistically significant difference existed in mental health problems between women with disabilities who experienced and didn't experience GBV. The five dependent variables of the study (i.e., depression, state anxiety, trait anxiety, PTSD and self-esteem) were computed and compared between women with disabilities who experienced and did not experience GBV using one-way multivariate analysis of variance (MANOVA). The MANOVA in this analysis had a 2 x 5 design. The independent variable in this analysis was the two independent groups (i.e., women with disability who experienced GBV and women with disability who did not experience GBV). The set of dependent variables consisted of five variables: depression, state anxiety, trait anxiety, PTSD and self-esteem. The descriptive statistics of the dependent and independent variables were presented in *Table 28*.

Table 28
Descriptive Statistics for Women with Disabilities Who Experienced and didn't Experience GBV

Dependent Variable	Groups	Mean	Std. Deviation	N
Depressive symptom	WWD who didn't experience GBV	10.1667	5.59001	48
	WWD who experienced GBV	15.2275	6.59420	255
STAIST	WWD who didn't experience GBV	42.81	7.83	48
	WWD who experienced GBV	50.38	9.09	255
STAIT	WWD who didn't experience GBV	43.6042	7.14512	48
	WWD who experienced GBV	48.1882	6.55893	255
PTSD	WWD who didn't experience GBV	33.0000	8.63442	48
	WWD who experienced GBV	46.9490	11.76515	255
Self-esteem	WWD who didn't experience GBV	17.2708	5.50	48
	WWD who experienced GBV	15.6588	4.71	255

As indicated in *Table 29*, the result revealed significant multivariate main effect for mental health problems between women with disability who experienced and did not experience GBV on the combined dependent variables $F(5, 297)=10.338$, $p=.000$; Wilk's Lambda=.852; partial eta squared=.148. Power to detect the effect was 1.000.

Table 29

MANOVA Result for Women with Disabilities Who Experienced and didn't Experience GBV

Multivariate Tests									
Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power
Intercept	Pillai's Trace	.977	2477.577	5.000	297.000	.000	.977	12387.883	1.000
	Wilks' Lambda	.023	2477.577	5.000	297.000	.000	.977	12387.883	1.000
	Hotelling's Trace	41.710	2477.577	5.000	297.000	.000	.977	12387.883	1.000
	Roy's Largest Root	41.710	2477.577	5.000	297.000	.000	.977	12387.883	1.000
WWD who experience and did not experience d GBV	Pillai's Trace	.148	10.338	5.000	297.000	.000	.148	51.692	1.000
	Wilks' Lambda	.852	10.338	5.000	297.000	.000	.148	51.692	1.000
	Hotelling's Trace	.174	10.338	5.000	297.000	.000	.148	51.692	1.000
	Roy's Largest Root	.174	10.338	5.000	297.000	.000	.148	51.692	1.000

Since there was a statistically significant result for the MANOVA analysis, each dependent variable was analyzed separately using independent samples t-tests to determine to which of the five dependent variables the groups differed significantly. In order to reduce a chance of Type one error, Bonferroni technique was applied so as to compute univariate t-tests analysis across the five dependent variables using a criterion p-value of .01 for each test.

Table 30

Independent Samples t-test Result for WWD who Experienced and did not Experience GBV

Variable	Group	Mean(SD)	t	Sig.(2-tailed)	df
Depression	WWD who didn't experience GBV	10.16 (5.6)	-4.989*	.000	301
	WWD who experienced GBV	15.23(6.6)			
State anxiety	WWD who didn't experience GBV	42.81 (7.83)	-5.406*	.000	301
	WWD who experienced GBV	50.38 (9.09)			
Trait anxiety	WWD who didn't experience GBV	43.60 (7.14)	-1.166	.249	301
	WWD who experienced GBV	48.19(6.55)			
PTSD	WWD who didn't experience GBV	33.00 (8.63)	-4.438*	.000	301
	WWD who experienced GBV	46.95(11.76)			
Self-esteem	WWD who didn't experience GBV	17.42(5.65)	2.294	.022	301
	WWD who experienced GBV	15.65 (4.71)			

*p < 0.01 and also Bonferroni adjusted

An independent sample t-test was conducted to compare the five dependent variables (depression, state-anxiety, trait-anxiety, PTSD and self-esteem) among WWD who experienced and did not experience GBV. There was statistical significant difference in depression score for women with disabilities who experienced GBV (M=15.23, SD=6.6) and women with disabilities who did not experience the problem [M=10.16, SD=5.58; $t(301) = 4.989$, $p=.000$] for Bonferroni adjusted p-value. The magnitude of the differences in the mean was nearly more than moderate effect (eta squared is equal to 0.076). That is 7.6% of the variance in depression is explained by the state of being abused or not.

As indicated in Table 30, independent samples t-test was also computed for state and trait anxiety. Accordingly, there was statistical significant difference in STAI-S mean score between WWD who experienced GBV (M=50.38, SD=9.09) and WWD disability who did not experience GBV [M=42.81 SD=7.83; $t(383) = -5.406$, $p=.0.000$]. The magnitude of the difference in mean was more than moderate effect (eta squared is equal to 0.088). Similarly, independent sample t-test was also computed for mean score that obtained through STAI-Trait

anxiety. Thus, there was no statistical significant difference in STAI-Trait anxiety mean score between women with disability who experienced GBV ($M=48.19$, $SD=6.55$) and women with disabilities who did not experience GBV [$M=43.6$, $SD=7.14$; $t(301) = -1.166$, $p=.249$]. The magnitude of the differences in the mean was very small (eta squared is equal to 0.0045). That is 0.45% of the variance in trait anxiety was explained by the two groups.

Next, independent sample t-test was computed for mean score for PTSD for the two groups of WWD who experienced and did not experience GBV. Accordingly, there was statistical significant difference for score for PTSD among women with disability ($M=46.94$, $SD=11.76$) and women without disability [$M=33$, $SD=8.63$; $t(301)=-4.438$, $p=.00$] who experienced GBV. The magnitude of the differences in the mean was moderate effect (eta squared is equal to 0.0614). That is 6.14% of the variance in PTSD is explained by the two groups.

Finally, similar to the above four variables, independent sample t-test was computed for mean score for self-esteem for the two groups of women with disabilities who experienced and did not experience GBV. Accordingly, there was no statistically significant difference for the score of self-esteem among WWD who experienced GBV ($M=15.65$ $SD=4.71$) and WWD who did not experience GBV [$M=17.42$ $SD=5.65$; $t(301) = 2.294$, $p=.022$]. The magnitude of the differences in the mean was more than small effect (eta squared is equal to 0.017). That is 1.7% of the variance in self-esteem is explained by the two groups.

4.10 Comparison of Mental Health Problems and Self-Esteem among Women with Visual, Hearing and Physical Disabilities who Experienced GBV

The final purpose of this study was to assess whether or not statistically significant difference exists in mental health problems among women with visual, hearing and physical disabilities who experienced GBV. The five dependent variables, mental health problems (i.e., depression, state anxiety, trait anxiety, PTSD) and also self-esteem were computed and compared between women living with visual, hearing and physical disabilities using one-way multivariate analysis of variance (MANOVA). The MANOVA in this analysis had a 2 x 5 design. The independent variables in this analysis were experiencing GBV and living with visual, hearing and physical disability. The descriptive statistics of the GBV assessment result was presented in *Table 31*.

Table 31

Descriptive Statistics for Women Living with Visual, Hearing and Physical Disability

	Participants' disability type	Mean	Std. Deviation	N
Depressive Symptom	Visual	14.78	6.53	99
	Hearing	15.68	7.06	78
	Physical	15.35	6.23	78
State anxiety	Visual	49.62	8.29	99
	Hearing	52.36	9.04	78
	Physical	50.55	9.64	78
Trait anxiety	Visual	47.82	7.00	99
	Hearing	48.50	5.59	78
	Physical	48.35	6.92	78
PTSD	Visual	46.20	10.72	99
	Hearing	46.03	13.06	78
	Physical	48.82	11.59	78
Self-esteem	Visual	15.9495	4.68905	99
	Hearing	15.7179	4.37792	78
	Physical	15.2308	5.07585	78

A one- way multivariate analysis of variance was performed to investigate differences in mental health problems (depression, state-anxiety, trait-anxiety and PTSD) and self-esteem among women living with visual, hearing and physical disabilities who experienced GBV. As indicated in *Table 32*, the result revealed no significant multivariate main effect for combined dependent variables among women who experienced GBV, $F(10, 496) = 1.457$, $P = 0.153$; Wilks' Lambda = 0.944; partial eta squared = 0.029. Power to detect the effect was 0.735.

Table 32

MANOVA Result for Women Living with Visual, Hearing and Physical Disability

		Multivariate Tests							
Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^d
Intercept	Pillai's Trace	.990	4698.750	5.000	248.000	.000	.990	23493.748	1.000
	Wilks' Lambda	.010	4698.750	5.000	248.000	.000	.990	23493.748	1.000
	Hotelling's Trace	94.73	4698.750	5.000	248.000	.000	.990	23493.748	1.000
	Roy's Largest Root	94.73	4698.750	5.000	248.000	.000	.990	23493.748	1.000
Women living with visual, hearing and physical disability	Pillai's Trace	.057	1.461	10.000	498.000	.151	.029	14.613	.737
	Wilks' Lambda	.944	1.457	10.000	496.000	.153	.029	14.567	.735
	Hotelling's Trace	.059	1.452	10.000	494.000	.154	.029	14.520	.733
	Roy's Largest root	.036	1.818	5.000	249.000	.110	.035	9.088	.617

$P < 0.05$

Chapter Five

Discussion

Although the issue of GBV and victims' mental health problem is documented elsewhere in the globe, very little is known about this important issue in Ethiopia. Especially, the problem among WWD is not well researched and documented even at global level. As a result, the present study was mainly conceived for the purpose of investigating the extent of GBV and its association with mental health problems among WWD and WWOD in Addis Ababa. Like other researchers who worked in this area (Ferres et al., 2013; Astbury & Walji, 2013; Schröttle & Glammeier, 2013), the investigator of the current study faced with shortage of previous studies in the area. As a result, some findings were less compared and contrasted especially findings on the mental health status of WWD who experienced GBV.

The discussion was made in line with the research questions and the major findings. First, the demographic characteristics data was conferred. Next, the prevalence and incidence rate of physical, sexual and psychological violence among WWD and WWOD were discussed. Next, the presence of significant difference on the level of depression, anxiety, PTSD and self-esteem across some selected demographic characteristics between WWD and WWOD who experienced GBV were conversed. Furthermore, the presence of significant difference on the level of depression, anxiety, PTSD and self-esteem among WWD who experienced and did not experience GBV were conversed. Finally, whether there was statistical significant differences in mental health status due to GBV among women living with visual, hearing and physical disabilities were discussed.

5.1 Socio-Demographics Characteristics of the Study Participants

The main objective of the present study is to make visible the prevalence and incidence rate of GBV among women living with visual, hearing and physical disabilities and women without disabilities in Addis Ababa. In addition, the study explored the association of GBV with mental health problems specifically depression, anxiety and PTSD and also self-esteem. The sample participants were four hundred eighty. More than half of them were WWD and the remaining 36.87% were WWOD. Out of the total 303 WWD proportional numbers of women living with visual, hearing and physical disabilities were participated in the study. From the total 177 WWOD, 7 women were provided incomplete information for the instrument during the data collection as a result they were excluded from the analysis. The age range of participants was 15 to 56 years which is relatively active age range. Fifty eight point six percent of the study participants were Orthodox Christian followers. About one fourth of the participants were Muslims, and the remaining was composed of catholic, protestant and others. Regarding the marital status, about half of them were never married, one third was married, and the remaining fifteen percent together were divorced.

Unemployment and economic dependency can be the other factors that aggravated the rate of GBV against women especially for WWDs. For instance, 65.7% of the study participants' educational status was secondary education completed, elementary school and illiterate in aggregate. On top of that, from the total study participants one fourth of them had no occupations. Consequently, low educational status as well as unemployment can create fertile ground for dependency on other individuals that could have direct relation with the rate of GBV.

Furthermore, the result of the current study revealed that half of the study participants earned below one thousands birr or thirty seven US \$ per month. WWD and WWOD economic dependency on husband/partners or other individual created the way for a direct consequence for the exposure of GBV. In line with this finding, Nigest (2011) in her study reported that jobs that fit people with disabilities are difficult to find, even if they get some they are not given equal chance to compete with people without disabilities. They are usually judged by their looks or disability. This leads them to be economically dependent on others.

The other demographic characteristics of the current study were alcohol and khat use. The result indicated that from the total participants nearly half and more than one third of the partners/husbands of the participants abused alcohol and chewed khat respectively. Almost comparable finding was reported by Nigist (2011) for alcohol abuse. However, in the same study relatively lower 25(4.7%) was reported for chewed khat. The main reason for variation on the rate for chewing khat is the growth of Khat chewing in the country at alarming rate from time to time. The other reason is the accessibility of the substance almost everywhere in the shop like other commodity in the country especially in Addis Ababa. Husbands who drink alcohol easily quarrel with their wife consequently physically and emotionally violate their wife/partner. Furthermore, economic instability or crises may be created in the family as a result of husbands/partners abuse of alcohol.

5.2 Incidence and Prevalence Rate of GBV among WWDs and WWODs

In this sub-section composite victimization of GBV, prevalence and incidence rate of physical, sexual and psychological violence and previous research findings and implication of the findings for both WWDs and WWODs were presented.

5.2.1 Prevalence Rate of GBV among WWDs and WWODs

The current study revealed that the composite life time prevalence of GBV were 84.1% and 76.48% for WWDs and WWODs respectively. In line with the finding from WWDs, a study among WWD reported that 86.8% participants experienced GBV during their life time (Goodman *et al.*, 2001). Other study also revealed that 90% of WWDs experienced GBV during their life time (Curry *et al.*, 2011). Review of researches among WWDs revealed that the prevalence of any type of interpersonal violence among WWDs ranged from 26.0%-90% for life time (Hughes *et al.*, 2011). Therefore, the findings of the current study for WWDs were in line with the previous studies in the area.

Regarding the composite results of GBV among WWODs, almost comparable results were reported in different parts of Ethiopia. For instance, 76.5% in Western Ethiopia (Abeya *et al.*, 2011), 72.0% among rural women in Ethiopia (Deyessa *et al.*, 2010), 78.0% (Agumasie *et al.*, 2015) WWOD experienced GBV during their life time. However, the composite result of the current findings for WWOD was relatively higher than research reports from other African countries. For instance, the life time physical and/or sexual violence 34% in Egypt, 42% in Cameroon, 64% in Democratic Republic of Congo, 59% in Uganda and 18% in Nigeria (UN Women, 2011). The extent of GBV in Ethiopia is even higher than different countries in the

world. For instance, Garcia-Moreno et al. (2005) reported that highest prevalence rate of GBV 71% was reported in Ethiopia out of ten studied countries. Therefore, the situation of GBV for WWODs was highly prevalent.

On top of that, the extent of GBV among WWDs was more devastating. There may be various contributing factors for the existing overwhelming condition of GBV among WWDs. Some of these could be WWDs poor economic status and related dependency on others, unable to defend themselves from abusers attack as a result of their disability status. In addition, WWDs may not able to report their case for legal system or concerned bodies and the existing stereotypic attitude of the society towards people with disability and their sexual behavior. Regarding GBV among WWDs, there may be other factors that exposed them for GBV. For instance a review of fifteen researches in Ethiopia reported that domestic violence against women was significantly associated with partner alcohol consumption and khat chewing, family history of violence, educational status (Agumasie & Bezatu, 2015). The findings of the current study imply the extent of GBV in the study area is highly prevalent that needs intervention and prevention activities. For instance, economic empowerment of both WWDs and WWODs, educating the society about gender equality and the rights of people with disabilities and inculcating the issue of gender and disability in school curriculum can minimize the problem of GBV.

The current study also revealed that 64% and 51.8% of WWDs and WWODs respectively were experienced physical violence during their life time. These findings confirmed that WWDs were more exposed for physical violence than WWODs. Almost comparable result

was reported by Powers et al. (2009) 67% of WWDs experienced physical violence during their life time. On the other hand, a study by Schröttle and Glammeier (2013) in Germany reported that the life time prevalence rate of physical violence was 75% which was higher than the current study. Various factors may contribute for inconsistencies across these studies. Along with socio-cultural difference between the two studies, Schröttle and Glammeier (2013) used different instrument with the current study. For example to measure physical violence they used about 21 items and large number of participants N=10,264. Therefore, these differences may be the cause for the inconsistency in result between the two studies. In relation to prevalence rate of physical violence among WWDs, as mentioned above the current study revealed that half of the participants experienced the problem during their life time. The finding was nearly consistent with global study of GBV in ten countries including Ethiopia, 48.7% for life time (Garcia-Moreno *et al.*, 2005). Similarly, 48% of women in Africa, Uganda experienced physical violence during their life time (UN women, 2011). The finding of the current study was also in line with a systematic review of ten studies in Ethiopia. The review reported that the lifetime domestic physical violence by husband/intimate partner against women ranged from 31 to 76.5% (Agumasie & Bezatu, 2015). Generally, the current findings imply that WWDs were also more vulnerable than WWDs. The main reason for the higher prevalence rate of physical violence among WWDs may be their disability related conditions. In addition, the findings of the prevalence rate of physical violence was one of the highest in its extent that needs prevention and intervention as well as further comprehensive study about the cause of the problem in the study area.

Regarding the prevalence rate of sexual violence, the present study revealed that 72.6% and 50% of WWDs and WWODs respectively experienced the problem. Like that of composite as well as physical violence, WWDs were also more vulnerable for sexual violence than WWOD. Almost comparable result was reported by Brownridge (2006) 68% to 83% of women with disability sexually assaulted during their life time. In addition, Goodman *et al.* (2001) reported that 68.2% of WWDs experienced sexual violence. As mentioned above, half of WWODs were experienced sexual violence during their life time. Contrast with the current findings, the prevalence rate of sexual violence was 59% in Ethiopian province (Garcia-Moreno *et al.*, 2005). The variation may be observed as a result of population difference that is urban and rural participants. Women in rural situation may be experienced more GBV than women from urban areas (Vung, 2008). Therefore, the main difference may be originated from respondents' residence differences. However, the findings of the current study were in line with a systematic review of ten studies in Ethiopia. According to this review the life time domestic sexual violence against women ranged from 19.2 to 59% (Agumasie & Bezatu, 2015).

The current study also clearly revealed that WWDs were highly vulnerable for sexual violence than WWODs. Various contributing factors may aggravate the problem of WWDs for sexual violence than WWODs. For instance, WWDs may be considered as helpless and non-sexual. These prejudices may tend to make WWDs less visible to society, many people may think that they unlikely to be abused, especially for sexual abuse. For example, Kvam and Braathen (2008) reported that men perceived that WWDs as free from sexually transmitted disease including HIV/AIDS, not sexually active and virgin. Such misconception may aggravate the problem of sexual violence against WWDs. However, the reason for the existing huge gap in

prevalence rate between WWDs, WWODs may be because of women in different aspects such as living in rural areas, women living with intellectual disabilities, students in schools and higher educations, women from refugee returnees and the like should be investigated using comprehensive study.

Regarding the prevalence rate of psychological violence, 79.2% and 65.9% of WWDs and WWODs respectively experienced the problem. The finding confirmed that WWDs were highly exposed for psychological violence than WWODs. Almost comparable result, 78% of people living with physical disabilities was experienced psychological violence during their life time (Schröttle and Glammeier, 2013). On the contrary, a research conducted in Cambodia among WWDs revealed that 43.5% experienced some type of emotional violence from a partner during their life time (Astbury & Walji, 2013). This result is relatively lower than current study and findings from Germany by (Schröttle & Glammeier, 2013).

Thus, these research findings imply that there was also inconsistency across studies in the prevalence rate of psychological violence. For instance, the problem of GBV among women in general and WWDs in particular in Western societies and sub-Saharan African country, Ethiopia may not be equal because of economic, social, legal system effectiveness to alleviate the problem and others. However, findings from the current study in relation with GBV were among the highest in its prevalence rate likewise reported by (Curry *et al.*, 2011; Schröttle & Glammeier, 2013). The same study also reported that WWDs are vulnerable for psychological violence both by the act of emotional violence they experienced from perpetrators as well as because of their disability status. The stereotypic attitudes of the society in relation to their

disability can also be the other significant factor that affects their normal psychological well-being.

Concerning psychological violence among WWOD, as stated earlier in this sub-topic, 65.9% of them experienced psychological violence during their life time. Using the same instrument for the current study, proportional result was reported, 63% for life time prevalence of emotional abuse in Pakistan (Khan *et al.*, 2014). In addition, the multi-country study of GBV also reported that 20-75% of the participants reported experiencing one emotionally abusive act from a partner during their lifetime (Garcia-Moreno *et al.*, 2005). Therefore, the finding of the current study was in line with the findings of previous studies. Similar to physical and sexual violence of WWDs were highly vulnerable for psychological violence than WWODs because of different contributing factors. Furthermore, the current study revealed that the prevalence and incidence rate of psychological violence was the most prevalent compared with sexual and physical violence. Similarly, Vung (2008) in his research reported that the extent of psychological violence exceeds sexual as well as physical violence. This may be due to the impact of physical and sexual violence on the psychological well-being of the victims. In addition, WWDs psychological well-being may be also threatened by their disability status from stereotypic attitude of the society.

5.2.2 Incidence Rate of GBV among WWDs and WWODs

In this sub-section the composite victimization at least one of from physical, sexual and psychological violence, the incidence rate of physical, sexual and psychological violence and previous research findings and implication of the findings were presented. The composite results

of GBV for WWDs and WWOD were 76.56% and 60% respectively during the last twelve months. In contrast with the current findings concerning past year victimization of any violence, result from the current study was relatively higher than other studies. For example, Curry *et al.* (2011) reported that 68% experienced any of the violence during past year. In addition, Slayter (2009) reported 56% of WWDs experienced any of the violence during the last 12 months. The main reasons for this variation could be these researches were conducted in western societies which are quite different in various aspects such as economic, social and cultural from sub-Saharan African country, Ethiopia. The current study also revealed that WWDs were highly exposed for GBV than WWODs for the last 12 months. Some of the reasons could be WWDs poor economic status and related dependency on others, unable to defend themselves from abusers attack as a result of their disability status. Furthermore, WWDs may not able to report their case for legal system or concerned bodies and the existing stereotypic attitude of the society towards people with disability and their sexual behavior.

As mentioned above 60% of WWODs experienced GBV during the last 12 months. Contrast to this, a study in Western Ethiopia revealed that 72.5% reported that they had experienced GBV during the last twelve months (Abeya *et al.*, 2011). This was higher than the finding from the current study. The reason for the inconsistency is the study conducted in rural Ethiopia, where men superiority is common. However, the finding from the current study was among the highest in its extent. This shows the seriousness of GBV both for life time and the last 12 months.

Generally, the last 12 months composite result of WWDs and WWODs confirmed that the problem of GBV was serious problem around the study area. Furthermore, the problem is more devastating among WWDs than WWODs because of different factors that related with their disability status. However, it is necessary to conduct comprehensive studies that make visible the cause of GBV among women in general and women living with disabilities in particular.

The current study also revealed that 40% and 34.2% of WWDs and WWODs respectively experienced physical violence during the last 12 months. This finding was relatively higher than other available researches. For example, 20 % (Astbury & Walji, 2013), 25.6% (Goodman *et al.*, 2001), 22% (Curry *et al.*, 2009) reported the incidence rate of physical violence during the last 12 months. Various factors may contribute for inconsistencies across studies. Some of these could be methodological variations among the studies, socio-cultural conditions of the society towards people with disability and the legal procedure and related process to correct perpetrators misbehaviour, economic dependency of victims on their abusers and others. The findings of the current study were among the highest result both in incidence as well as prevalence rate. On top of that, the finding also confirmed WWDs were highly exposed for physical violence than WWOD. The main reasons for the higher incidence rate of physical violence among WWDs may be their disability related conditions. In addition, the findings of the incidence rate of physical violence was one of the highest in its extent that need prevention and intervention as well as further study about the cause of the problem in the study area. For instance, cost of living as well as number of drug abusers in the city seems grown at alarming rate. Such fertile ground can be

factors for raise of GBV in the study area. Thus, these and related knowledge gap that could be factors for GBV need to be investigated.

In relation to GBV among WWODs about one third of the participants experienced physical violence. Likewise, Deyessa et al. (2010) 32% of the participants were experienced physical violence during the last 12 months. Almost comparable result 29% was also reported by (Garcia-Moreno et al., 2005). The current finding was also comparable with other results from different Africa countries, such as 33% in Liberia, 31% in Kenya, 34.9% in Uganda for the last 12 months (UN Women, 2011). These findings were relatively lower compared with results from WWDs. Therefore, all these findings confirmed that WWDs were highly exposed for physical violence than WWODs. Thus, it propagates the need of intensive work to alleviate the problem especially for WWDs.

Regarding the incidence rate of sexual violence against WWD and WWODs, the present study revealed that 43.2% and 42.9% of them were experienced the problem during the last twelve months respectively. As clearly observed, almost similar findings were observed among the two groups. Findings from the current study concerning incidence rate revealed that sexual violence was relatively higher. Almost balanced result was reported 44.4% in Ethiopia by using the same instrument for the current study (Garcia-Moreno *et al.*, 2005). On the other hand, a review of 22 articles in US by Hughes *et al.* (2011) reported that past year sexual abuse was range from 0.4-30%.

The main reasons for the existing variation could be the living situation, economical level and related factors that existed in US and in sub-Saharan Africa, Ethiopia. However, the current finding for WWODs was relatively higher than findings from different African countries

such as 13.6% in Kenya, 24.8% Uganda, 3.9% Egypt, 3.2% Nigeria and 16% Zambia (UN Women, 2011). Thus, the situation of GBV in Ethiopia is even more devastating than most of African countries (UN Women, 2011; Garcia-Moreno et al., 2005). For instance, in Ethiopia where sexual violence is prevalent, doctors at the Fistula Hospital in Addis Ababa operate on approximately 1, 200 women in a year (UNFPA, 2010). This figure confirmed to what extent the problem can affect the physical and psychological health of the victims that has a direct and interrelated impact on the overall well-being of the victims.

Concerning the incidence rate of psychological violence among WWDs and WWODs, the present study revealed that 61.7% and 37.1% respectively experienced the problem. The finding confirmed that WWDs were highly exposed for psychological violence than WWODs. This huge gap between the two groups can be due to different conditions of WWDs. For instance, INWWD (2010) reported that violence against WWDs occurs primarily as a result of attitudes towards women in patriarchal society coupled with vulnerability in relation to the conditions that result from the disability itself. Some of the conditions that can expose WWDs for violence includes being physically less capable of defending themselves, difficulty in reporting maltreatment due to lack of accessible forms of communication, greater amount of dependency on other for care, failure of others to believe some survivors, fear of reporting the abuse (INWWD, 2010).

In contrast to the current findings from WWDs, Curry *et al.* (2009) reported that 51% of WWDs experienced psychological violence during the last 12 months. In addition, a research conducted in Cambodia revealed that 36.7% of the participants experienced some type of emotional violence from a partner during the last 12 months (Astbury & Walji, 2013) which is

relatively lower than the current study. These research findings also confirmed the presence of inconsistency across studies in the prevalence and incidence rate of psychological violence. For instance, the problem of GBV among women in general and WWDs in particular in Western societies and sub-Saharan African country, Ethiopia may not be equal because of economic, socio-structural context, legal system effectiveness to alleviate the problem and the like.

Concerning incidence rate of psychological violence among WWD nearly one third of the participants experienced the problem during the last twelve months. In line with this finding a study on intimate partner violence against women in rural Vietnam revealed that 34% of the participants experienced psychological violence during the last 12 months (Vung, 2008).

Furthermore, the current study revealed that the prevalence and incidence rate of psychological violence was the most prevalent compared with sexual and physical violence. Similar findings were also reported by (Vung, 2008). This may be because of physical as well as sexual violence contributes for the psychological abnormality of the victims. In addition, WWD psychological well-being may be also threatened by their disability status and the attitude of the family as well as the society towards them. For example, a qualitative finding from Asbury and Walji (2013, p. 23) reported that WWDs were vulnerable for psychological violence both by the act of emotional violence they experienced from perpetrators as well as because of their disability status.

The findings of the current study imply that GBV is highly prevalent among WWDs and WWDs. However, WWD were more vulnerable for physical, sexual and psychological violence than WWD. The main reasons may be due to WWD economic dependency on other

individuals, stereotypic attitude of the society the assumption that says “no one could battered them”, lack of information how to report their case for concerned bodies and physical and environmental conditions (mobility limitation, unable to defend themselves from perpetrators) and the like. Some conditions also exposed WWD and WWOD to accept and live in abusive relationships. Some of these conditions were lack of alternative means of economic support, concern for their children, lack of support from family and friends, stigma or fear of losing custody of children associated with divorce, and love and the hope that the partner will change (WHO, 2012). Therefore, findings of the study promulgate the need of attention and intervention to alleviate the problem of GBV that threaten victims’ normal physical, social, psychological and mental health.

5.3 GBV among Women Living with Visual, Hearing and Physical Disabilities

The other objective of the study was to examine the prevalence and incidence rate of GBV among women living with visual, hearing and physical disabilities.

5.3.1 Prevalence rate of GBV among Women Living with Visual, Hearing and Physical Disabilities

Regarding, composite prevalence rate of GBV 88.12%, 82%, and 78% for women living with visual, hearing and physical disabilities respectively. In line with the current study, Hughes et al. (2011) reported that the prevalence of any type of interpersonal violence among WWD ranged from 26.0%-90.0% for lifetime. In addition, comparable findings with the current study were reported from different studies. For example, the life time prevalence of violence among WWD were 90% (Curry *et al.*, 2011), 86.8% (Goodman *et al.*, 2001). However, none of

these studies presented the prevalence of any violence for specific type of disabilities. In addition, findings from the current study also revealed that the aggregate result of GBV among WWOD were 76.48% which is less than the result for women living with visual, hearing and physical disabilities. These findings strengthen the argument that says WWDs are highly vulnerable for GBV than WWODs. WWDs may experience GBV as a result of many contributing factors. WWDs may be less access to information about how to protect themselves against violence and rape. Perpetrators are more likely to believe that their actions will not be discovered, and WWDs are often not perceived to be credible reporters (Zijde, 1999). Women with disabilities can be more dependent on other people for care, physically and/or financially (ibid). Under such circumstances, women may fear reporting abuse as it could result in the breaking of bonds and the loss of care they may require. In some circumstances, the lack of accessible forms of communication is an impediment to reporting maltreatment (Zijde, 1999). Therefore, these devastating conditions imply the need of prevention and interventions for WWDs who experienced and even for those who did not experience the problem.

In addition to the aggregate result, the present study also revealed the prevalence rate of physical, sexual and psychological violence among women living with visual, hearing and physical disabilities were highly prevalent. For instance, 65.3%, 66.7% and 59% women living with visual, hearing and physical disabilities respectively experienced physical violence during their life time. In line with this result, Schröttle and Glammeier (2013) reported that 66% and 59% of women living with visual disability and physical disability respectively experienced physical violence during their life time. However, 75% of women living with hearing disability experienced the problem (Schröttle & Glammeier, 2013) which is relatively higher than the

current study. The current study also revealed that WWODs were relatively less vulnerable for physical violence 51.8% compared with women living with visual, hearing and physical disabilities. This finding also proves that women living in disability were relatively more vulnerable for physical violence than WWODs.

In relation to sexual violence among the three groups of women living with disabilities, women living with visual and physical disability were highly vulnerable for the problem than women living with hearing disability for prevalence rate. The result revealed that 74.25%, 60.8% and 72% women living with visual, hearing and physical disabilities respectively experienced sexual violence during their life time. Contrast to the current findings, Schröttle and Glammeier (2013) reported that 29%, 44% and 29% of women living with visual, hearing and physical disabilities experienced sexual violence. The reasons for the observed variation between these studies may relate with the socio-economic and cultural variation between Europe and sub-Saharan African country, Ethiopia. However, the finding of the current study depicted that sexual violence is also critical problem among the three groups of WWDs.

The current findings also revealed that higher number of women living with visual, hearing and physical disabilities than WWODs were experienced sexual violence. In line with these findings, studies that compared both WWDs and WWODs, the formers were more likely to experience abuse, especially sexual abuse (Barrett et al., 2009; Brownridge, 2006; Martin et al., 2006; Nosek, Howland et al., 2001; Slayter, 2009). This was particularly true for lifetime exposure to violence.

Concerning psychological violence among the women living with visual, hearing and physical disabilities, women living with visual disability were highly vulnerable for the problem than women living with physical and hearing disability for life time prevalence rate. Eighty percent, 74% and 72.5% of women living with visual, physical and hearing disabilities respectively experienced psychological violence during their life time. Likewise, 88%, 84% and 78% women living with visual, hearing and physical disabilities respectively reported their experience of psychological violence (Schröttle & Glammeier, 2013). As indicated above, relatively higher prevalence rate of psychological violence than the current findings reported by women living with visual, hearing and physical disability (Ibid). The reason for the inconsistency across these studies can be due to difference in methods between the two studies.

In addition, the current study revealed that from the three groups, women living with visual and hearing disabilities were relatively more vulnerable for physical, sexual, and psychological violence than women living with physical disability. Similar results were also reported from (Schröttle & Glammeier, 2013). This implies that, women living in different disability type are not uniformly vulnerable for GBV. For instance, women living with intellectual disabilities may be more vulnerable and at higher risk for GBV than women with other forms of disabilities. Similarly, women living with visual and hearing disabilities are not equally vulnerable with women living with physical disability. This is because women living in serious disability can be less likely to receive any sexual education, more likely to live in poverty and often very dependent on caregivers (Barger et al., 2009). Similarly, Brownridge (2006) reported that WWDs live in abusive relationships as a result of economically or physically dependent on their perpetrator. Consequently, their dependence on others is an evident factor, as

this raises the risk of psychological, physical and sexual abuse. Other significant risk factors are the social and cultural myths which exist in relation to disability. The myths revolving around disability concerns in particular asexuality and is generating pervasive labeling of WWD as asexual. As a consequence of these myths, the sexuality of WWD is often overlooked, and is contributing to increasing the likelihood of victimization. Moreover, it is rarely assumed that WWD have intimate partners, which means that intimate partner violence often goes hidden in these cases (Barnett *et al.*, 2009).

Finally, the current study indicated that for physical, sexual and psychological violence and incidence and prevalence rate of GBV among women living in disability revealed relatively higher vulnerability than WWOD. Similar findings were reported from different parts of the world such as from Germany (Schrötle & Glammeier, 2013), Cambodia (Asbury & Walji, 2013) and from Spain (Ferres *et al.*, 2013). Findings from these studies confirmed that WWD are relatively more vulnerable for physical, sexual and psychological violence than WWOD. In addition, psychological violence was the most commonly observed problem than physical and sexual violence. This is due to both physical and sexual violence have created distress on the victims' psychological well-being.

Regarding the implication of the findings, both WWDs and WWODs are exposed for GBV during their life time. However, WWDs were highly vulnerable for GBV than WWODs. Factors for such vulnerability may related with their disability and related social complications. Therefore, concerned bodies in the area of disability and GBV need to conduct a comprehensive study that make visible the possible causes and extent of GBV across the different disability types including women living with intellectual disabilities.

5.3.2 Incidence rate of GBV among Women Living with Visual, Hearing and Physical Disabilities

Regarding composite incidence rate of GBV, 72.27%, 66%, and 64% of women living with visual, hearing and physical disabilities respectively experienced the problem. Likewise the current study, Hughes *et al.* (2011) reported that the incidence rate of any type of interpersonal violence among WWD ranged from 2.0%-70.0% for the past year. In addition, the past year incidence rate among WWD reported that 70 % (Curry *et al.*, 2003), 68 % (Curry *et al.*, 2009). The findings of the current study imply that women living with visual disabilities were relatively more vulnerable for GBV than women living with hearing and physical disabilities. In addition, compared with other studies the findings of the current study revealed that the problem of GBV is severe among WWDs in the study area. Thus, it is necessary to take prevention as well as intervention to alleviate the problem. Furthermore, professionals in the area need to investigate the cause of the problem among WWDs as well as women in general.

Regarding incidence rate of physical violence, 45.5%, 35.3% and 40% women living with visual, hearing and physical disabilities respectively experienced the problem. Goodman *et al.* (2001) in his study reported that 27% of WWDs experienced physical violence during the last 12 months. In addition, Slayter (2009) reported that 21.3% of WWDs who experienced physical violence. The findings from these two studies were relatively lower than the current study. The main reasons were the situation of violence in western societies sometimes may not be comparable with sub-Saharan African countries, Ethiopia because economic status, socio-cultural variations and difference in technological advancement between these two locations.

The incidence rate of physical violence depicted that women living with visual, physical and hearing disabilities ranked from highest to the least vulnerable for physical violence. Many factors may contribute for the observed inconsistency between findings. Some of these can be living with disability and related dependency on other individual, their ability to sense and defend themselves from abuser, the attitude of the society towards people living with disability and the effectiveness of the legal system to protect victims' rights and legal measures taken on offenders.

In relation to sexual violence for the last 12 months among the three groups, women living with visual disability were highly vulnerable than women living with physical disability and women living with hearing disability. The result revealed that 61.4%, 45.1% and 48% women living with visual, hearing and physical disabilities respectively experienced the problem. There were limited research findings that shown the incidence rate of sexual violence among WWD. However, studies in US revealed that 30% of WWD experienced sexual violence during the last twelve months (Curry *et al.*, 2009). The reasons for the observed inconsistency in findings could be the socio-economic, cultural difference and the effectiveness of legal system to protect women from abuse in western society and in Africa. Currently, there are limited number of research findings that make visible the extent of GBV and the major causes of the problem in the study area. Thus, professionals in the area of gender, special need educators, violence, reproductive health, law and the like need to conduct researches that give the holistic picture of the problem.

Concerning psychological violence among the three groups, women living with visual disability were highly vulnerable for the problem than women living with hearing and physical disability. The finding revealed that 76.3%, 57.8% and 51% of women living with visual, hearing and physical disabilities respectively experienced psychological violence during the last 12 months. Similar to women living with physical disabilities Curry et al. (2009) reported that 51% of WWDs experienced psychological violence. In another study Curry et al. (2003) reported that 36% of WWDs experienced psychological violence which is lower than the findings of the current study. The variation may be result from socio-cultural variation between western society and study area. The current study also revealed that 66% of WWODs experienced psychological violence which is relatively lower than women living with visual, hearing and physical disabilities.

The vulnerability of WWDs for GBV can be more aggravated by different factors that have a direct relation with their disability status. Increase risk of isolation, contact with multiple potential perpetrators, increased physical, emotional and economic dependency as a result of a disability and cultural/societal barriers that impede their ability to find and obtain assistance can be some of the factors that increased their vulnerability. In addition, as a result of multiple and extended vulnerability for GBV, WWDs psychological well-being can be threatened.

5.4 Independent Existence and Overlap between Physical, Sexual and Psychological Violence

Most of the time one type of violence does not exist independently; rather it co-exists with other type of violence. Based on the life time prevalence and incidence data, independent

existence and overlap of physical, sexual and psychological violence were assessed for WWD and WWOD separately. In relation to patterns of occurrence, physical violence was less likely to occur in isolated form compared with psychological and sexual violence for both WWDs and WWODs. This finding was consistent with research report in western Ethiopia (Abeya *et al.*, 2011) among WWODs. This is because physical violence may affect the psychological well-being and sexual behavior of the victims but psychological and sexual behavior may have less probability of producing effect on the physical condition of the victims.

Regarding co-existence of sexual, psychological and physical violence (overlap) was the most commonly occurring form than the other two joint occurrences for both WWD and WWOD. This finding is consistent with study from South Africa (Dunkle *et al.*, 2004) which is best explained as physical violence is often accompanied by psychological attacks, threatening and controlling behaviors. Furthermore, WHO multi-country study on violence against women states that most acts of physical violence reflect a pattern of abuse rather than an isolated incident (García-Moreno *et al.*, 2005). The present research also shows the most severe violence seemed to be associated with greater overlapping of the different forms of psychological, physical and sexual violence that accounted for 58.41% of the total violence among WWDs and 40% for WWODs. This constitutes extremely serious situations and is much higher than 42% reported overlaps of physical and sexual violence in study from Butajira, Ethiopia among WWOD (Gossaye *et al.*, 2003). But the finding from Butajira, Ethiopia was almost nearly proportional with the current study for the total violence among WWOD.

The present study also revealed that psychological violence was the most commonly observed problem both by WWD and WWOD who experienced GBV during their life time.

Consistent with this finding, Abeya *et al.* (2011); García-Moreno *et al.* (2005) and Vung (2008) reported that psychological violence was the most commonly observed problem. The main reason behind for the extent of psychological violence exceeds the other two violence could be both physical as well as sexual violence have direct impact on the psychological well-being of the victims. For instance, women who experienced physical and sexual violence, they may develop fear dishonesty, hopelessness, self-blame, dependency on drugs and alcohol, ineffective in most activities and others. These effects worsen the level of psychological violence more than physical and sexual violence mainly for women living with disabilities.

Overall, the prevalence and incidence rate and the overlap between the elements of GBV revealed that the problems seem shocking that need urgent intervention mechanism to sustain the life of both WWD and WWOD. In addition, most of the time one element of GBV does not exist independently. Therefore, professional who provide intervention need to be aware the overlap existence of different types of GBV on a single case and consequently they need to provide a comprehensive intervention.

5.5 Prevalence of Mental Health Problems and self-Esteem among WWD and WWOD

In this sub-section, findings in relation to mental health problems (depression, anxiety and PTSD) and self-esteem among WWD and WWOD who experienced and did not experience GBV discussed.

5.5.1 Depression

Depression is a common mental health problem that manifest by depressed mood, loss of interest or pleasure, decreased energy, feelings of guilt or low self-worth, disturbed sleep or appetite, and poor concentration. While depression is the leading cause of disability for both

males and females, the burden of depression is 50% higher for females than males (WHO, 2008). The finding from the current study revealed that WWD who experienced GBV had scored higher for severe depression, moderately severe depression and moderate depression than WWD who didn't experienced physical, sexual and psychological abuse. Likewise, a study in Cambodia among WWD who experienced and did not experience GBV revealed that WWDs who experienced GBV scored higher depression mean score than WWDs who did not experience GBV (Asbury & Walji, 2013).

In addition, the current study revealed that WWOD who experienced GBV revealed higher level of severe depression, moderately severe depression and moderate depression than WWOD who did not experience GBV. Similarly, Bizu *et al.* (2009) assessed depression by using the same instrument for the current study among University students who experienced and did not experience GBV in Awassa, Ethiopia. Students who experienced GBV reported that 22.9% moderate depression, 10.4% moderately severe depression and 1.2% severe depression compared with non-abused counter parts 14.1% moderate depression, 6.3% moderately severe depression and 1.3% severe depression.

On the other hand, the current finding was higher than a research reported in North-West Ethiopia using the same instrument for the current study. According to this study, the prevalence rate of depression was 17.5%, where 10.7% of patients with mild depression, 4.2% were with moderate depression, 1.9% was with moderately severe depression, and 0.6% had severe depression (Getasew *et al.*, 2016). The main reason for the variation is participants of the study were not women who experienced GBV, rather, patients with other physical health problem.

Almost comparable research finding with the current study was reported from Spain by Pico-alfonso *et al.* (2006). According to the study 17.3% and 17.3% met the criteria for severe and moderate depression compared with women who did not experience physical and psychological violence on severe depression at all and 3.8% moderate depression. However, the level of severe depression level was higher in the current study than finding from Spain. The reason behind this difference could be the situation of women in different economic, cultural different societies in Ethiopia and Spain. For instance, women from developing and economically poor situation may be more vulnerable for than women in better and economically advanced society. Empirical research has consistently and robustly shown that individuals from lower economic status experience more stressors and associated mental health difficulties, such as anxiety and depression than individuals from advanced economic society (Carbone-Lopez *et al.*, 2006).

The frequency, form and consistency of violence can determine its impact on the victims' mental health status. Cscardi and O'Leary (1992) in their study depressive symptoms, self-esteem and self-blame among battered women reported that 52% of women who participated in the study develop depression. As the number, form and subsequent consequences of physical aggression acts increased and or worsened, the women's depressive symptoms increased. A strong correlation existed between the frequency of husband's physical aggression and both depressive symptoms and poor self-esteem. The same study reported that there was also strong correlation between the severity of husband's physical aggression and depressive symptomatology (Cscardi & O'Leary, 1992).

Regarding the level of depression between WWD and WWOD who experienced GBV there were almost proportional number of participants met the criteria for severe depression and

moderate severe depression. But more number of WWD reported for moderate depression than WWOD who experienced GBV. Even though there is lack of previous publications in the area to compare the finding, the main reason for the variation could be the overall life situation of WWD such as ignorance, unemployment, economic and environmental dependency on other individuals, mistreatment from others and along with the rate of GBV. Finding from the current study also support this fact. For instance, more number of WWDs who did not experience GBV met the criteria for severe depression and moderate severe depression than WWOD who did not experience GBV. This finding implies there depression is one outcome of GBV among WWDs and WWODs. However, more researches need to be conducted among different populations such as women among women living with intellectual disabilities, fistula patients, as well as refugees.

5.5.2 State-Anxiety

The available research findings indicated that there was an association between GBV and high anxiety level. Finding from the current study investigated the level of anxiety among WWD and WWOD who experienced and did not experience GBV. The result depicted that more than half of WWD who experienced GBV met the criteria for moderate anxiety and one fourth of them for severe anxiety or in aggregate 88.23% of them met the criteria for severe level of anxiety and moderate anxiety. On the other hand, only 6.25% of WWD who did not experienced GBV met the criteria for severe anxiety. The findings confirmed that GBV is a trigger factor that aggravate mental health problems specifically anxiety among women in general and WWD in particular. Even though there is scarcity of research finding that revealed the prevalence rate of anxiety among WWD who experienced GBV, research finding from Cambodia confirmed that WWD who experienced GBV were more likely than who did not experience GBV to sleep

badly, feel frightened, have trouble thinking, crying more than usual, feel their work was suffering, feel like worthless person, feel tired all the time, to think about ending their life (Astbury & Walji, 2013). Therefore, these findings imply that there is strong association between GBV and state-anxiety among WWD.

Regarding the level of state-anxiety among WWODs, majority of them who experienced GBV in aggregate (84.61%) met the criteria for moderate anxiety and severe anxiety level. This finding was slightly higher than a study conducted in Australia among women who experienced GBV 77.3% (Rees *et al.*, 2011). Furthermore, a research finding from US depicted those women who experienced GBV reported 73-82% of them qualify for the presence of anxiety (Campbell *et al.*, 2008). The finding of the current study was also higher than a study conducted among randomly selected 622 abused women that reported 25.9% experienced moderate anxiety, 17.4% severe anxiety, and 29.9% very severe anxiety (Thabet *et al.*, 2015) using Taylor manifestation anxiety scale. The finding of the current research was higher than finding from the above mentioned researches. The main reason for variation could be these researches conducted in western society. In addition, there was methodological difference with the current study.

The findings of the current study also revealed that slightly higher number of WWD who experienced GBV met the criteria for state-anxiety than WWOD who experienced GBV. This is due to higher vulnerability of WWD for GBV than WWODs. Regarding the implication of these findings, GBV is one of the factors that aggravate mental health problem among women with and without disabilities. Therefore, it is necessary to design and provide essential therapeutic intervention to minimize mental health problem among WWD and WWOD who experienced GBV.

The reality in most developing world including in Ethiopia revealed that there are very limited studies on the area of gender, disability and mental health. Therefore, comprehensive studies need to be conducted to make the problem more visible. For instance, the extent of GBV and mental health problems are not clearly understood among women living with intellectual disabilities, displaced people, refugee, students in the school and the like. GBV and mental health complication may be also the problem of husbands and male partners.

5.5.3 Trait-anxiety

Trait-anxiety was the other variable that was assessed in the current study. Trait-anxiety is an individual personal sensitivity for responding to anxiety provoking stimuli such as violence. Findings from the current study revealed that 23% of WWD who did not experience GBV met the criteria for severe anxiety compared with 18.43% of WWD who experienced GBV. In addition, almost half of WWD who did not experience GBV met the criteria for moderate anxiety level. Similarly, more number of WWOD who did not experience GBV met the criteria for moderate anxiety than WWOD who experienced GBV. This implies that the observed difference in state-anxiety (conditioned anxiety) was due to GBV not by their personality trait. In other words, the high anxiety level observed among women who experienced GBV was the outcome of their exposure for violence not due to their personality trait for anxiety. Furthermore, WWD who experienced GBV revealed slightly higher mean score for severe anxiety than WWOD who experienced GBV. This can be due to higher vulnerability rate of WWD for GBV than WWOD counter parts. Generally speaking, the finding implies that there is an association between GBV and state-anxiety than trait-anxiety. In other words, the observed anxiety among

WWD and WWOD who experienced GBV was mainly the outcome of their exposure for physical, sexual and psychological violence. The effect of their personal sensitivity was minimal.

5.5.4 PTSD

PTSD is outcome of some kind of traumatic events and has symptoms such as physiological arousal, persistent re-experiencing of the trauma (intrusive thinking), trouble sleeping, irritability, trouble concentrating, being watchful, arousal, feeling jumpy, fear, avoidance, hyper vigilance, irritability, and psychic numbing including dissociation(American Psychiatric Association, 1994).

Research findings reported that PTSD is the common mental health problem among battered women. The prevalence rate of PTSD among the victims varies across studies. In addition, in some population like people with disabilities it is difficult to get research reports that revealed the prevalence rate of PTSD among battered women.

The present study assessed prevalence rate of PTSD among WWD and WWOD who experienced and didn't experience GBV. Accordingly, from the total WWD who experienced GBV, more than half of them 61% met the criteria for the presence of PTSD. On the other hand, only one out of ten (10%) WWD who did not experienced GBV met the criteria for PTSD. These data confirmed that WWD who experienced GBV were highly vulnerable for PTSD mental health problem.

Regarding GBV and PTSD among WWODs, the current study revealed that out of the total WWOD who experienced GBV, almost half of them met the criteria for the presence of PTSD. On the other hand, almost negligible number of WWOD who did not experienced GBV met the criteria for PTSD. Compared with other studies, the finding of the current study was

relatively lower. For example, a study that assessed the association of GBV and mental health and psychosocial functioning among women by using Composite International Diagnostic Interview version 3.0 of the world Health organization's World Mental health survey Initiative (WMH-CIDI 3.) reported that 56.2% were met criteria for PTSD (Rees *et al.*, 2011). In addition, Golding (1999) assessed the prevalence of mental health problems among women with a history of intimate partner violence, finding the weighted mean prevalence of 63.8% in 11 studies of PTSD (Golding, 1999). The main reason for this variation may be related with the methodological related difference between the two studies. Other study examining PTSD in battered women have identified a strong, positive correlation between severity of abuse and intensity of PTSD symptomatology (Wood, 2000).

The current study also revealed that more number of WWD who experienced GBV met the criteria for PTSD than WWOD who experienced GBV. The variation in PTSD level among the two groups is due to difference in prevalence and incidence rate of GBV. As observed in the finding of the current study, WWDs were more vulnerable than WWODs for GBV.

Regarding the implications of the current study, both WWD and WWOD who experienced GBV were highly vulnerable for different mental health problems including depression, anxiety, and PTSD than their counterparts who did not experience the problem. This implies that GBV is a factor that determines the mental health status of women in general and women with disability in particular. Therefore, women who experienced GBV need to get psychological support to minimize mental health problem. The psychological support that provided need to be starting from the day that the victim reported the case. In most cases, the extent and association of GBV and mental health problem among the different societies may not

clearly known in Ethiopia and other African countries. Therefore, scholars in the area need to investigate the cause, consequences, and possible indigenous intervention mechanisms to alleviate the existing devastating conditions of GBV and mental health problems.

5.5.5 Self-Esteem

In the current study, self-esteem is equated with an individual's sense of worthiness, adequacy, and self-respect (Rosenberg, 1965). The impacts of GBV on WWD and WWODs self-esteem have not been sufficiently explored.

The present study revealed that both WWD and WWOD who experienced GBV scored lower self-esteem than WWDs and WWODs who did not experience GBV. The available research findings reported that women self-esteem was treated by GBV. For instance, a study on domestic violence and self-esteem in Addis Ababa reported the presence of correlation between self-esteem and psychological violence, physical violence and sexual violence, -.349, -.333 and -.308 respectively (Abraham, 2015). This finding confirmed self-esteem had inverse relationship with physical, sexual and psychological violence. That means when the intensity of types of abuse increase, battered women state of self-esteem decreases (Ibid). There are research reports that concede with the current findings. For instance, a study comparing chronically battered women and formerly abused women found that women who were still involved in a battering relationship had lower self-esteem on average than formerly abused women (Frisch & MacKenzie, 1991). A study in Spain among women living with physical and visual disability reported that abused women revealed lower self-esteem compared with non-abused women (Ferres et al., 2013). Similarly, Curry et al. (2001) abused WWD experience low self-esteem, feelings of blame, health problems, and related mental health problem just like WWOD. These findings also verify that

GBV is a factor that lowers women's self-esteem. Furthermore, the findings imply that the effect of violence has long last effect on women self-esteem even the women departed or divorced from their abusive partner.

Csardi and O'Leary (1992) in their study depression symptoms, self-esteem and self-blame among battered women reported that as the number, form and subsequent consequences of physical aggression acts increased and or worsened, women's self-esteem decreased. The same study also indicated that a strong correlation existed between the frequency of husband's physical aggression and poor self-esteem. In addition, there was also strong correlation between the severities of husband's physical aggression and poor-self-esteem (Csardi & O'Leary, 1992).

The other finding observed in the current study was more number of WWD who experienced GBV scored lower self-esteem compared with WWOD who did not experience GBV during their life time. Similarly, more number of WWDs who experienced GBV score low self-esteem than WWODs who experienced GBV. These findings imply that in addition to GBV, there is also other factor that threaten the self-esteem of women with disability that need to be investigated. For instance, living with disability and related complications, poor economic status, complicated health problem and stigma and discrimination from the society can be important factors that threaten WWD's self-esteem. Therefore, WWD and WWOD self-esteem was affected by their vulnerability for GBV. Consequently, those who experienced the problem need social support and therapeutic intervention to enhance their self-esteem.

5.6 Association between GBV and Mental Health and Self-Esteem across Some Selected Demographic Variables

5.6.1 Mental Health Problems across Age of WWD Who Experienced GBV

The current study investigated whether there is statistically significant difference in mental health problems and self-esteem across 15-24, 25-34, 35-44 and 45 and above years of age groups of WWDs who experienced GBV. Finding from one-way MANOVA analysis revealed that there was no statistically significant difference between the four age groups. Inconsistent with the current findings, studies from western societies revealed that older survivors experience increased depression (Campbell, Dworkin & Cabral, 2009) and older victims have been found to have fewer PTSD symptoms when assaulted by relatives (Ullman et al., 2006).

Reasons for the inconsistency of the current finding with previous studies were population difference. For instance the previous studies were conducted among WWOD and the current study conducted among WWD. In addition, socio-cultural difference, technological advancement, the level citizens' get of human right protection and the like may contribute for the inconsistency of the findings. Furthermore, many studies even from western societies reported that GBV among WWD is a common phenomenon. For example, Hughes et al. (2011) reviewed 22 studies that were conducted from 2000-2010 among WWD and reported that the prevalence rate of any type of interpersonal violence among WWD ranged from 26.0%-90.0% for lifetime. Moreover, women in general and WWDs in particular in sub-Saharan African countries experienced different economic and social problems that have direct relation with mental health problem. These realities can increase the rate of GBV and related different mental health problems. Accordingly, the effect of GBV specifically mental health problem and self-esteem are

not illuminating significant variation across different age groups among WWDs. This finding implies that GBV and related mental health problem and self-esteem are not the issue of specific age group rather the problem of all age categories.

5.6.2 Mental Health Problems across Marital Status of WWD Who Experienced GBV

The association of mental health problem (depression, state-anxiety, trait-anxiety and PTSD) and self-esteem across never married, married and divorced WWDs who experienced GBV was examined. One-way MANOVA followed by univariate ANOVA and post-hoc multiple comparisons were used to analyze the data. The result revealed that there was statistically significant difference among never married, married and divorced WWD for the three dependent variables (i.e., depression, PTSD and self-esteem). However, there was no statistically significant difference among the three groups for state-anxiety and trait-anxiety. Upon the result from univariate ANOVA post-hoc multiple comparisons were conducted for the three variables. The result of the post-hoc multiple comparisons is discussed as follows:

Depression- Women who were never married revealed significantly lower depression mean score than married and divorced. On the other hand, divorced women revealed significantly higher depression level than women who are never married. However, there was no statically significant difference between married and divorced WWD for depression mean score. Similarly, study reported that the average levels of depression among divorced women was equal (Herbert, Silver, Cohen, & Ellard, 1991) or exceed (Lerner & Kennedy, 2000) those of women still involved in abusive relationships. The findings from the previous as well as the current study revealed that both women who found both in marriage as well as divorced relationship

experienced mental health problem as a result of GBV more than women who never married. Like that of women in abusive marital relationship, divorced women developed mental health problem as a result of economic problem, taking extra responsibility to care children and managing the new family, being isolated and negative attitude of the society towards divorced women (Anderson *et al.*, 2003). All these broken family situation and instability may elevate depression level of divorced women. This implies that WWD who are in marriage or divorced life show higher level of depression as a consequence of GBV than women who never married. The finding also implies that GBV and related complicated mental health and self-esteem related problems are observed mainly after the women establish marital relationship.

PTSD- the univariate post-hoc comparison analysis result depicted that only WWDs who never married revealed statistically significant difference with married women. However, there was no statistical significant difference between never married and divorced as well as married and divorced women for PTSD mean score. Married women revealed significantly higher mean score than never married women for PTSD. Similarly, a study found that being married was related to increased trauma (Homish, 2006). Contrast to the current finding other studies reported that there was variation even among women who never married and divorced. Studies have found that average levels of PTSD among divorced women equal (Herbert, Silver, Cohen, & Ellard, 1991) or exceed (Lerner & Kennedy, 2000) those of women still involved in abusive relationships. These findings strengthen the assumption of women in marriage relation as well as divorced life were experienced relatively higher mental health problem as a result of GBV. However, the main reason for the observed inconsistency between the previous and the current study is difference in

study population that is living with and without disability. In addition, socio-economic and cultural factors could be the other contributing factors.

Self-Esteem- Research findings reported the negative impact of GBV on battered women's self-esteem (Campbell, 2002; Cascardi & O'Leary, 1992). A research in Ethiopia also revealed that women who experienced GBV revealed lower self-esteem (Abraham, 2015). Concerning self-esteem across marital status, the univariate post-hoc comparison result indicated that women who never married were significantly different from married women. In addition, women who never married were significantly different from divorced women. However, there was no statistically significant difference between married and divorced women for self-esteem mean score. In other words, women who never married revealed higher self-esteem than married and divorced counter parts. Along with the effect of GBV, women's marital status has significant impact on their self-esteem. For instance, Anderson et al. (2003) reported that divorced women faced different challenges such as economic, additional responsibility to manage broken family, isolation, disapproval and disrespect even from their family member and from the society. Such miserable and uncomfortable life situation can threaten their self-esteem.

Passing through different marital status may bring different life changes on women in general and WWDs in particular. Successful marital relation can bring positive outcome on the couple's self-esteem and their family members. On the contrary, unsuccessful marital relationship can result in disagreement and conflict accompanied by GBV and related mental health problems and ultimately produces divorce. Therefore, professionals who are working in

the area of GBV and mental health problem need to take into consideration clients' marital status when they alleviate their problem.

5.6.3 Partner Alcohol Abuse and WWDs' Mental Health and Self-esteem Status

Many research findings indicated that there is strong positive correlation between partner/husband alcohol abuse and increased rate of GBV. For instance, review of research finding in Ethiopia among abused women reported that domestic violence was positively correlated with partner alcohol consumption and "Khat" chewing (Agumasie & Bezatu, 2015). Similarly, a systematic review pooled the results of 11 studies and found that harmful use of alcohol was associated with a 4.6 times increased risk of exposure to intimate partner violence compared to mild or no alcohol use (Gil-Gonzalez *et al.*, 2006). However, research study that examined the association of GBV and mental health problem among women who have alcohol abuser and non-alcohol abuser partner hardly available in Ethiopian context.

As a result, the current study examined the presence of statistically significant difference in mental health problems and self-esteem between abused WWD who have alcohol abuser and non-abuser partner. One-way MANOVA result followed by independent samples t-test result depicted that there was statistically significant difference between the two groups for depression, PTSD and self-esteem mean score. However, there was no statistically significant difference for state-anxiety and trait-anxiety. In other words, WWD who have alcohol abuser partner/husband scored higher mean score than who did not have alcohol abuser partner for depression, PTSD and self-esteem. In line with these finding researches reported that men's alcohol problems increase the risk of depression in their female partners (Homish *et al.*, 2006;

Dawson *et al.*, 2007). In addition, excessive partner alcohol use increased the risk for common mental health disorders two-to three fold (Nayak *et al.*, 2010).

In addition, partner alcohol consumption was related with victims' PTSD level (Sullivan *et al.*, 2012). The same study also reported that PTSD related mental health problems that resulted from inter personal violence was correlated with victims alcoholic problem (Ibid). The current study also revealed that there was statistically significant difference in self-esteem mean score between women who have alcohol abuser partners/husbands and women who have not alcohol abuser partners/husbands.

The reason could be due to perpetrator who abused alcohol unable to consciously control themselves. A study depicted that alcohol operates as a situational factor, increasing the likelihood of violence by reducing inhibition, clouding judgment, and impairing an individual's ability to interpret cues (Homish *et al.*, 2006). The aggressive character of the person can result in devastating violence that has direct relation with victims' mental health problems such as depression and PTSD and also lower self-esteem. Thus, alcohol is a trigger factor that intensifies the severity of violence that result complicated and long lasting effect on the victims' mental health status. On the other hand, poor mental health problem can also result for domestic violence as well as for substance abuse. Therefore, these three intertwined factors are the cause that threatens the normal well-being of women in general and WWDs in particular. The current findings imply that husband/partner alcohol abuse is triggering factor that increase the rate of GBV that has direct impact on the mental health problem among WWD. Therefore, the concerned bodies who work in the area need to take into account the intertwined nature of partner/husband alcohol abuse, GBV and mental health problem to intervene the problem.

5.7 GBV and Mental Health Problems and Self-Esteem among WWD and WWOD Who Experienced GBV

The current study also examined whether there was statistically significant difference in mental health problem and self-esteem between WWD and WWODs who experienced GBV or not. The MANOVA followed by univariate t-test analysis result revealed that the two groups were statically significantly different only for self-esteem mean score but not for depression, STAI-S, STAI-T and PTSD. WWOD who experienced GBV scored relatively higher mean score for Rosenberg self-esteem than WWD who experienced. In other words, WWOD who experienced GBV are better in their self-esteem mean score than those of WWD. Research findings reported that WWDs were highly vulnerable for GBV in different aspects than WWOD (Martin, 2006; Astbury & Walji, 2013; Schrottle & Glammeier, 2013). That means WWD experience GBV because of their gender, economic status, as a consequence of their disabilities. Thus, all these visible and invisible triggering factors for GBV can lower their self-esteem than WWOD.

In line with the current study, a research conducted by Nosek *et al.* (2001) among women with physical disabilities and without disabilities reported that WWDs had significantly lower self-esteem, social isolation, over protection during childhood, poor quality of intimate relationship and lower rates of salaried employment than WWODs. This implies that in addition to GBV, women with disabilities self-esteem can be threatened by many factors that directly or indirectly related with their disability status. Therefore, because of the cumulative effects of GBV and living with disability, WWD develop lower self-esteem than WWOD counter parts. Thus, WWDs who experienced GBV should get interventions that enhance their self-esteem. In

addition, WWDs in general and WWDs who experienced GBV in particular should get specific disability related intervention that helps to protect them from abuse.

5.8 Comparison of Mental health problems and self-esteem among WWD and who experienced and did not experience GBV.

Even though, it is difficult to get research publications that explored the effect of GBV on mental health status of WWD, findings from WWOD revealed the presence of significant relationship. For instance, the effect of GBV with depression (Campbell, 2002; Warshaw & Barnes, 2003; Pico-Alfonso *et al.*, 2006), anxiety (Thabet *et al.*, 2015; Pico-Alfonso *et al.*, 2006), PTSD (Warshaw & Barnes, 2003; Pico-Alfonso *et al.*, 2006) and self-esteem (Abraham, 2015) were confirmed.

The current study also explored whether there was statistically significant difference in mental health problems and also self-esteem between WWD who experienced and did not experience GBV. One-way MANOVA followed by univariate t-test was computed to investigate differences in mental health problem between the two groups. The MANOVA result depicted that there was statistically significant difference between the two groups. The univariate t-test result reveals that there was statistically significant difference between WWD who experienced and did not experience GBV for three dependent variables, depression, state-anxiety, and PTSD but not for STAI-T and self-esteem. The univariate t-tests result of these four dependent variables are discussed in the next paragraphs.

Depression- The result of depression symptoms revealed that there was a statistically significant difference between WWD who experienced and did not experience GBV. The mean score of WWD who experienced GBV was significantly different from that of non-abused counter parts.

This implies that WWD who experienced GBV have higher depression level compared with WWD who did not experience GBV. Likewise, Pico-alfonso *et al.* (2006) in the study of GBV and its association with mental health among women who experienced and didn't experience physical, sexual, and psychological violence reported the presence of difference between the two groups. The result revealed that women who experienced physical or physical/psychological violence reported higher mean score for Beck's Depression Inventory (BDI) than non-abused women. Regarding, severity of depression symptoms, women who experienced GBV reported higher score for severe, moderate and mild depression than non-abused women (Pico-alfonso *et al.*, 2006). This study also reported that women who experienced GBV used more psychiatric and psychological treatments than non-abused women.

Similar research finding was also reported from Latin America, Cheli that compared mental health status of abused and non-abused women (Ceballo *et al.*, 2004). The t-test result of the two groups indicated that the group of mother who reported physical violence was significantly more depressed than who did not report any physical aggression. Mothers in relationship with physical violence reported a depression scale mean of 26.7(SD=14.9) in comparison to the mothers with no physical violence who had a mean of 17.2 (SD=12.7) on the Center for Epidemiological studies Depression Scale (Ibid).

Research findings in Ethiopia were also in line with the current study. For instance, a research conducted in Southern part of Ethiopia, among female University students depicted that students who experienced any GBV were reported more depressive symptoms than their non-abused counterparts. Abused students reported 31.2% higher than non-abused students (Bizu *et*

al., 2009). Similarly, a research conducted in Dire Dawa, Eastern Ethiopia, revealed that there was statistical significant difference in depression score among participants who disclosed and did not disclose experience of sexual violence (Mesfin, 2015). Thus, these findings confirmed that women who experienced GBV came up with higher level of depression than non-abused counter parts.

State-Anxiety-The t-test result for state-anxiety from the current study also shown that the mean score of WWD who experienced GBV was significantly different from that of non-abused counter parts. WWD who experienced GBV tend to have higher anxiety level compared with WWD who did not experience GBV. Likewise, a study by Thabet et al. (2015) reported that out of randomly selected women, 25.9% experienced moderate anxiety, 17.4% severe anxiety, and 29.9% very severe anxiety. In addition, a research conducted in Australia on the life time prevalence of violence and mental health also indicated that 77.3 % of the women develop anxiety disorder (Rees *et al.*, 2011). A research conducted in Spain among women who were non-abused, physically/psychologically abused and psychologically abused (Pico-alfonso *et al.*, 2006, p.605) reported that women who experienced physically/psychologically abused women ($M=54.2$, $SD=34.1$) and psychologically abused women ($M=47.7$, $SD=5.8$) compared with non-abused women ($M=17.7$, $SD=18.2$) for Spielberger's STAI. A research finding in Ethiopia was also in line with the current study. For example, a research conducted in Eastern Ethiopia, revealed that there was statistically significant difference in anxiety mean score among participants who disclosed and did not disclose experiences of sexual violence (Mesfin, 2015). Hence, women who experienced GBV were revealed higher level of anxiety than non-abused counter parts.

PTSD-In the present study the level of PTSD among WWDs who experienced and did not experience GBV also computed. The mean score of PTSD of WWD who experienced GBV is significantly higher than that of non-abused counter parts. This implies that WWD who experienced GBV tend to have higher PTSD level compared with WWD who did not experience GBV. Many research findings were in line with the findings of the current study. These researches reported that PTSD is one of the most frequently observed consequences of violence against women (Pico-alfonso *et al.*, 2006; Warshaw & Barnes, 2003). In addition, Cascardi and colleagues reviewed a number of studies on abused women and reported that the rate of PTSD ranged from 31 to 84%, with modal rates ranging between 45 and 60% (Cascardi, O'Leary & Schlee, 1999).

Similarly, a meta-analysis of researches on violence and mental health among battered women revealed that the prevalence of mental health problems among women with a history of intimate partner violence, finding the weighted mean prevalence of 63.8% in 11 studies of PTSD (Golding, 1999, p. 99).

Likewise, a research finding was also reported from Latin America, Cheli that compared the level of PTSD of abused and non-abused women (Ceballo *et al.*, 2004). The t-test result of the two groups indicated that the group of mothers who reported mothers in relationship with physical violence experienced significantly more for the symptoms of PTSD than mothers who reported on physical violence. Mothers in physical abuse relationship reported on average of 13.9 PTSD symptoms (SD=3.8), compared to the mean of 9.7 symptoms (SD=4.9) reported by mothers without physical violence.

A research among women, who were non-abused, physically/psychologically abused and psychologically abused women by their intimate partners and the associations with mental health problem were reported in Spain (Pico-alfonso *et al.*, 2006, p.605). The study reported that women who experienced physically/psychologically abused women $M=14.7$, $SD = 12.1$ and psychologically abused women $M=14.2$, $SD= 10.1$ compared with non-abused women 0 ($M=2.1$, $SD= 3.0$) for the severity of PTSD (Ibid). This study confirmed that GBV was highly correlated with PTSD. Thus, all the above research findings were in line with findings of the current study. Therefore, all the above research findings including the current study substantiate, women who experienced GBV significantly different from non-abused counterparts for the level of PTSD scores.

Generally, results from previous as well as current study confirmed that there was strong association between GBV and mental health problems including depression, anxiety and PTSD. These findings imply the need of treatment such as medical, social support and psychotherapy intervention for those who experienced GBV.

5.9 Comparison of Mental Health Problems and Self-Esteem among Women with Visual, Hearing and Physical Disabilities who Experienced GBV.

Finally, the current study investigated whether there is statistical significant difference in mental health problem and also self-esteem between women living with visual, hearing and physical disabilities who experienced GBV or not. For this purpose, one-way MANOVA was computed and the result revealed that there was no statistically significant difference between the three groups.

GBV is common phenomenon among WWD. Many studies including the current revealed that GBV among WWDs was highly prevalent. For instance, a review of researches among WWDs revealed that the prevalence rate of any type of interpersonal violence ranged from 26-90% for life time (Hughes et al., 2011). Similarly, the current study revealed that 88.12%, 82% and 78% women living with visual, hearing and physical disability respectively experienced GBV during their life time. These findings imply that the problem of GBV among WWDs were highly prevalent and seems proportional among women living with visual, hearing and physical disabilities. The investigator of the current study assumes that such comparable vulnerability among women living visual, hearing and physical disabilities could be the reason for absence of statistically significant difference in mental health and self-esteem among the three groups of women living with disabilities. Therefore, considering the severity of GBV and mental health, intervention mechanisms need to be implemented.

Chapter Six

Summary, Conclusions and Recommendations

This chapter summarizes the study and presents the conclusions. Based on the conclusions recommendations are forwarded.

6.1 Summary

Studies on the association of GBV with mental health problems in Ethiopian context are hardly available. This study was conducted to examine the prevalence and incidence rate of GBV among WWDS and WWODs in Addis Ababa. In addition, the study also made visible the association of GBV (physical, sexual and psychological violence) with mental health problems (depression, anxiety and PTSD) and also self-esteem in the study area.

The study employed a quantitative research approach, that is, descriptive-comparative survey research design. Participants were 303 WWD (physical, visual and hearing) randomly selected from Ethiopian National Association for People Living with Visual Disability, Ethiopian National Association for People Living with Hearing Disability and Ethiopian National Association for People Living with Physical Disability. In addition, 170 randomly selected WWODs drawn from Addis Ababa city Administration were the participants of the study. Five standardized instruments that include GBV assessment instrument, PHQ-9 depression scale, STAI, PTSD-Symptom Scale and Rosenberg self-esteem scale were used.

The data collection processes were conducted by trained women assistant data collector. Data from women with hearing disability was collected by a skilled and experienced woman in sign language.

Descriptive statistics such as percentage, mean and standard deviations and inferential statistics such MANOVA followed by univariate analysis of variance and post-hoc comparison were used to analyze the data. The major findings are therefore summarized as follows:

❖ **Prevalence and incidence rate of GBV**

Concerning the composite result of GBV, 84.1% of WWDs and 76.48% of WWODs experienced at least one element of GBV during their life. Similarly, 76.56% of WWDs and 60% of WWODs experienced GBV during the last twelve months.

The result revealed that 63.7% and 51.8% of WWD and WWODs respectively experienced physical violence during their lifetime. On the other hand, 40% and 34.2% of WWD and WWODs respectively experienced physical violence during the last 12 months.

Regarding sexual violence, 72.6% and 50% of WWD and WWODs respectively experienced the problem during their lifetime. Similarly, 43.2% and 42.9% of WWD and WWODs respectively experienced sexual violence during the last 12 months.

Concerning psychological violence, 79.2% and 65.9% of WWD and WWODs respectively experienced the problem during their lifetime. On the other hand, 61.7% and 37% of WWD and WWODs respectively experienced psychological violence during the last 12 months.

The composite results of GBV across women with different disabilities revealed that 88.12%, 82% and 78% women living with visual, hearing and physical disabilities respectively experienced at least one element of GBV during their life time. Regarding incidence rate, 72.27%, 66% and 64% of women living with visual, hearing and physical disabilities respectively experienced at least one of physical, sexual and psychological violence during the last twelve months.

In relation to patterns of occurrence, physical violence was less likely to occur in isolated form compared with psychological and sexual violence for both WWDs and WWODs. Regarding co-existence of the three violence, psychological and physical violence overlap was the most commonly occurring form than the other two joint occurrences for both WWD and WWOD.

Prevalence rate of mental health problems among WWD

Regarding GBV and depression, WWD who experienced at least one component of GBV during their life, qualify more for severe depression, moderately severe depression and moderate depression than WWD who didn't experience the problem. Similarly, WWOD who experienced at least one components of GBV qualify more for the criteria of severe depression, moderately severe depression and mild depression than WWOD who did not experience GBV.

In relation to state-anxiety almost more than half of WWD who experienced GBV and one fourth of them met the criteria for moderate anxiety and high anxiety level respectively. On the other hand, out of the total 48 WWDs who did not experience GBV more than half that is 58.3% of them and only 6.25% of them met the criteria for moderate anxiety and severe anxiety level respectively. Regarding the level of anxiety among WWOD, out of the total 130 WWOD who

experienced GBV, majority 79.23% and 5.38% met the criteria for moderate anxiety and severe anxiety respectively. Contrary to these findings, out of the total 40 WWOD who did not experience GBV, 72.5% and 2.5 % met the criteria for moderate anxiety and severe anxiety level respectively.

Concerning PTSD, out of the total WWD who experienced GBV, 60.78% met the diagnostic criteria for PCL-C. On the contrary, out of the total WWD who did not experience GBV only 10.41% met the diagnostic criteria for the same instrument. Regarding WWOD who experienced GBV, out of the total 130 women, 48.46% met the diagnostic criteria for PCL-C compared with 2.5 % for WWOD who did not experience GBV.

Regarding self-esteem, the result confirmed that out of the total WWD who experienced GBV 255, 50% scored low self-esteem. On the contrary, 25% of WWD who didn't experience GBV scored low self-esteem. Similarly, out of the total 140 WWOD who experienced GBV, 23.84% scored lower self-esteem and only 10% WWOD who did not experience GBV scored low self-esteem. Therefore, all the above findings confirmed that there is clearly observable association between the rate of violence and the corresponding mental health problems and self-esteem.

❖ Association of GBV and Mental Health Problems across Some Selected Demographic Variables

A one-way MANOVA result revealed that there was no statistically significant multivariate main effect for mental health problems and self-esteem among the 15-24, 25-34, 35-44 and 45 and above age groups on the combined dependent variables.

A one-way MANOVA followed by univariate ANOVA and the subsequent post-hoc multiple comparisons were performed to investigate differences in mental health problems and also self-esteem among never married, married and divorced WWD who experienced GBV. The result revealed that there was statistically significant difference between never married and married as well as never married and divorced women for depression mean score. But there was no statistical significant difference between married and divorced women for the same dependent variables.

Regarding PTSD, there was statistically significant difference between never married and married women only. For self-esteem, there was statistically significant difference between never married and married, never married and divorced women. But there was no statistically significant difference between married and divorced women for the same dependent variables. However, there was no statistically significant difference for state-anxiety and trait-anxiety mean scores.

❖ Association of GBV with mental health problem among WWD and WWOD

The presence of statistically significant difference in mental health status and self-esteem among WWD and WWOD who experienced GBV was computed by using MANOVA followed by independent samples t-test. The finding showed that there was statistically significant difference between the two groups only for self-esteem mean score. However, there was no statistically significant difference for depression, state-anxiety, trait-anxiety and PTSD.

❖ Association of GBV with Mental Health Problem among WWDs who Experienced and did not Experience GBV

The presence of statistically significant difference in mental health status and self-esteem among WWD who experienced and did not experience GBV using MANOVA followed by independent samples t-test was computed. The finding revealed that there was statistically significant difference between the two groups for depression; state-anxiety and PTSD mean scores. However, there was no statistically significant difference for trait-anxiety and self-esteem.

❖ **Association of GBV with Mental Health Problem across Women with Disabilities**

Whether there was statistical significant difference in mental health status among women living with visual, hearing and physical disabilities or not computed by using MANOVA. The output confirmed that there was no statistically significant difference for the five dependent variables means score across women living with physical, visual and hearing disabilities.

6.2 Conclusions

The present study sheds light on the extent of GBV among WWD and WWOD. In addition, the study explored the association of GBV with mental health problems and also self-esteem in Addis Ababa. Even though there are some inconsistencies on the prevalence and incidence rate of GBV and the association of GBV with mental health problems including self-esteem, most of the findings of the current study are in line with the findings of preceding studies.

◆ **Prevalence and incident rate of GBV among WWDs and WWODs**

GBV is serious problem among WWDs and WWODs in the study area. However, WWDs are highly exposed for physical, sexual and psychological violence during their life time as well as for the last twelve months.

Women living with visual, hearing and physical disability are highly exposed for physical, sexual and psychological violence than WWODs for both prevalence rates and incidence rate.

◆ **Regarding the most commonly observed GBV**

For both WWDs and WWODs psychological violence is the most prevalent problem among WWD and WWOD than physical and sexual violence.

◆ **The extent of mental health problem among the study participants**

WWDs who experienced at least one element of GBV are qualifying more for moderate depression, moderate severe depression and severe depression than non-abused ones. Similarly, WWODs who experienced GBV are qualifying more for moderate depression, moderate severe depression and severe depression than WWODs who were not abused.

Similarly, WWDs who experienced at least one element of GBV are qualifying more for moderate anxiety and high anxiety than non-abused WWDs. Likewise, WWODs who experienced at least one element of GBV qualify more for moderate anxiety and high anxiety than non-abused WWODs.

Likewise, more number of WWDs who experienced at least one element of GBV are qualifying the criteria for PTSD more than non-abused WWDs. Similarly, WWODs who experienced GBV meet the criteria for PTSD than non-abused WWODs. In addition, women living with disability and without disability who experienced GBV revealed lower self-esteem

than their non-abused counter parts. Women living with disabilities who experienced GBV are more vulnerable for depression, anxiety, PTSD and lower self-esteem than WWODs who experienced the same problem. The bottom line is that, women who have experienced GBV suffer from more mental health problems than non-abused women.

◆ **The association between GBV and mental health problem across selected demographic variables**

In relation to demographic variables and mental health status for WWDs who experienced GBV, age does not inference the level of depression, state-anxiety, trait anxiety, PTSD and self-esteem. Regarding marital status, there is statistically significant difference between women who never married, married and divorced for depression. Married and divorced WWDs have higher level of depression than never married WWDs. However, married and divorced WWDs have similar depression level. There is also statistically significant difference between women who never married and married for PTSD. In other words, WWDs who are married have higher PTSD level than never married counterparts. However, married and divorced as well as divorced and never married WWDs have almost similar PTSD level or do not differ significantly. There is also statistically significant difference between women who never married with married and divorced for self-esteem. WWDs who never married have higher self-esteem than married and divorced women. However, divorced and married women have almost similar self-esteem level. But there is no statistically significant difference for state anxiety and trait-anxiety across the three marital status groups for WWDs who experienced GBV. That is WWDs who never married, married and divorced women have the same state-anxiety and trait-anxiety level.

There is statistically significant difference for depression; PTSD and self-esteem mean scores between WWDs who have alcohol abuser and non-alcohol abuser husband/partner. However, there is no statistically significant difference between these two groups for state-anxiety and trait-anxiety mean scores. That means WWDs who are living with alcohol abuser husband/partner have higher depression and PTSD level and lower self-esteem than WWDS who are living with non-alcohol abuser husband/partner. However, the two groups have similar state-anxiety and trait-anxiety problem status.

◆ **Association between GBV and mental health among WWDs and WWODs who experienced GBV**

There is no statistically significant mean score difference for depression, state-anxiety, trait-anxiety and PTSD among WWDs and WWODs who experienced GBV. However, there is statistical significant mean score difference for self-esteem between the two groups. That is WWDs with GBV experience have less self-esteem level than WWODs with the same problem. On the other hand, the two groups have almost similar depression, state-anxiety and PTSD levels.

◆ **Association between GBV and mental health among WWDs who experienced and didn't experience GBV**

There is statistically significant mean score difference for depression, state-anxiety and PTSD among WWDs who experienced and did not experience GBV. However, there is no statistically significant difference between the two groups for trait-anxiety and self-esteem mean score. That is WWDs with GBV reveal higher level of depression, state-anxiety and PTSD level than WWDs without GBV experience. But the two groups have similar self-esteem and trait-

anxiety level. This finding confirms that women are highly exposed for mental health problems as a consequence of GBV.

◆ **Association of GBV with Mental Health Problem across Women with Disabilities**

Finally, there is no statistically significant difference in mental health problems and self-esteem across women living with visual, hearing and physical disabilities who experienced GBV. That is women living with visual, hearing and physical disabilities have similar depression, state-anxiety, trait-anxiety, PTSD and self-esteem status.

6.3 Recommendation

Based on the findings of the study and the conclusions made, the following recommendations are forwarded as possible solutions to the problem investigated.

- ✓ GBV is highly prevalent both among WWD and WWODs in the study area. To alleviate the existing devastating conditions, the concerned bodies should work to change misconception, less responsiveness and negative attitude of the society towards gender equality and disability through mass media and different social gatherings.
- ✓ The issue of gender equality, gender based violence and its consequences and rights of people with disabilities need to be inculcated in the school curriculum.
- ✓ Economic problem is decisive factor that makes WWD and WWOD more vulnerable for GBV. Thus, the concerned bodies such as governmental, non-governmental and civic societies need to intensively work on the economic empowerment of women in general and WWDs in particular.
- ✓ All the concerned bodies such as religious institutions, civic societies, NGOs should be part of prevention as well as intervention processes providing awareness creation training

about physical, sexual and psychological violence and the way how to alleviate the problems.

- ✓ The concerned governmental and non-governmental organizations should establish rehabilitation centers that help to offer medical, psychological and social services for women who experienced GBV and related mental health problems.
- ✓ Education on sexual and reproductive rights, as well as access to appropriate anti-violence and support services are key areas where empowering women with disabilities would make a huge impact on their ability to control life choices and increase well-being.
- ✓ Specific studies with methodologies that are able to capture quantitative information from all women with disabilities including women with intellectual disabilities need to be developed and piloted in developing country settings including in Ethiopia.
- ✓ Rehabilitation centers that provide medical, psychological and social support for women who experienced GBV need to be established in different parts of the city. The concerned bodies such as governmental and non-governmental organizations should work jointly with these centers to alleviate GBV related problems.
- ✓ There should be an integrated work between the legal and medical professionals to investigate the problem of GBV and to minimize post-violence mental health complications.
- ✓ Perpetrators should be identified and necessary punishment should be commenced. Furthermore, laws related with GBV should be strengthened, and community awareness on the laws should be created through the available mass medias.

- ✓ GBV results severe mental health problem that affect women's well-being and productivity. Therefore, services like counseling and psychotherapy need to be accessible at grass root level in the community.
- ✓ Disability national associations together with the concerned bodies need to provide life skill and sexual education for people with disabilities to empower and protect themselves from violence.
- ✓ GBV and related human right violation issues among WWDs and WWODs in Ethiopian context is under researched. The aim of the current study was mainly to make visible the incidence, prevalence rate of GBV and its association with mental health problems like depression, anxiety, PTSD and self-esteem in Addis Ababa. However, the problem of GBV is not limited to this group and in Addis Ababa. The problem extends all women who are found at all age levels. This intensified problem calls for further study to address problems related to GBV in the community, in the organizations and educational institutions and the like. Triangulating findings from different research may help for policy makers and related concerned bodies to develop a comprehensive strategy and policy on GBV. Therefore, educators in the area need to be encouraged to work comprehensive researches that make the problem more visible and to develop appropriate intervention design.

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Appendix A: English Version of the Instrument

ADDIS ABABA UNIVERSITY
COLLEGE OF EDUCATION AND BEHAVIOURAL STUDIES
DEPARTEMENT OF SPECIAL NEEDS EDUCATION

Dear Participants,

I am a graduate student in the department of Special Needs Education, Addis Ababa University. Currently, I am conducting research entitled “**Violence and psychological functioning among women with and without disability in Addis Ababa**”. The intentions of these instruments are to gather first-hand information about your personal experiences in relation to physical, psychological and sexual violence and their impact on your psychological functioning.

Please note that, some of the questions may be very personal and might be tough to answer or talk about. However, they are of paramount importance to complete this study productive. I would like to assure you that all your answer/responses would be strictly kept confidential and they would be used only for research purpose.

Since your valuable contribution is indispensable to make my study plausible, meaningful and productive, I would be very grateful if you spend some time to fill in the questionnaire and provide accurate and genuine information. You need not write any information, including your name in any part of the instrument. You have the right to withdraw at any stage of the study without incurring any adverse consequences to yourself. If you have any questions, you can contact me personally or by the following Address. So that you can be reassured of total confidentiality to you as well as the information you provide.

Enishaw Teshome

enishaw19@gmail.com

Mob: +251913306216.

Are you voluntary to participate?

Yes ☐ continue to the next page

No ☐ Thank you. Terminate the relation.

Participation Consent Form

First of all I would like to thank you for taking your time and deciding to participate in this study. Read this consent form carefully.

You are invited to participate in a study, investigating the relationship between psychological functioning and physical, sexual and psychological violence. Your participation in this study is completely voluntary. If you want/wish to terminate your participation, you are welcome to do so at any point in the study. There is no foreseen risk involved in participating in the study.

If you have any questions or comments or need further information regarding this study, feel free to ask data collector. If you have any additional questions, please contact me, by the following address:

Enishaw Teshome,
Tel. +251913306216 or
Email: enishaw19@gmail.com

Thank you for your participation!!!

I, _____, have read (read for me) and understand the above information and have decided to participate in this research study. I understand that my participation is voluntary and that I may withdraw my participation at any time without prejudice after signing this form.

(Signature of Participant)

(Date)

(Signature of data collector)

(Date)

PART I- Demographics

In this section, eleven questions that request your personal data are presented. Please provide the appropriate information either by putting (✓) mark or supplying information.

Q. No	Questions	Answers/ choices for respondents
1	How old are you on your last birthday?	1. 15-24 2. 25-34 3. 35-44 4. 45-54 5. 55+
2	What is your disability?	1. Visual impairment 2. Hearing impairment 3. Physical impairment 4. No disability at all
3	What is your religion?	1. Orthodox 2. Muslim 3. Catholic 4. Protestant 5. Other(specify)
4	What is your marital status?	1. Never married 2. Married 3. Divorced 4. Separated 5. Widowed
5	What is the number of children you have?	1. No children 2. 1-3 children 3. 4-6 children 4. >6 children
6	What is your occupation?	1. Housewife 2. Trader 3. Government employee 4. Daily laborer 5. Others(specify)
7	What is your monthly income?	1. < 1000 Birr 2. 1000-2000Birr 3. 2001-3000Birr 4. 3001-4000Birr 5. 4001-5000Birr 6. >5000Birr
8	What is your educational level?	1. Illiterate 2. Primary education 3. Secondary education 4. Vocational training 5. Universty/college graduate 6. Master's Degree and above
9	For how long you spend in relation with your current partner?	1. <1 year 2. 1-3years 3. 4-6 years 4. >6 years
10	Does your partner drink alcohol?	1. Yes 2. No
11	Does your partner chew Khat?	1. Yes 2. No

PART II: Partner Violence

Direction: Below is a list of common symptoms of physical, sexual and psychological violence. Please carefully read each item and indicate your experience by putting (✓) for the absence or presence of physical, psychological and sexual violence during the last 12 months and before the last 12 months.

	Types of violence	Never	Yes, during the last 12 months	Yes, before the last 12 months
	I. Physical Violence: Has anyone			
1	slapped you or threw something at you that could hurt you?			
2	hit you with a fist or with something else that could hurt you?			
3	choked or burnt you on purpose?			
4	threatened by using a gun, knife or other weapon against you?			
	II. Sexual Violence: Has anyone			
5	physically forced you to have sexual intercourse when you did not want to?			
6	forced you to do something sexual that you found degrading or humiliating?			
7	touched you sexually in a way you did not approve?			
	III. Psychological Violence:			
8	Have you experienced any of these conditions by your boyfriend / husband, other relative or stranger? (<i>More than one answer is possible</i>) 1. Disgraced, 2. Scared, 3. Intimidating, 4. Impeding decision-making, 5. Verbal abuse 6. Isolating from friends/family members 7. Other(Specify) _____			
9	Have you experienced any of these conditions as a result of having sexual/physical violence? (<i>More than one answer is possible</i>) 1. Self-blame 2. Fear 3. Hopelessness 4. Suicidal ideation 5. Suicidal attempt 6. Alcohol dependency/abuse 7. Other (specify) _____			

10	Have you ever experienced any of these conditions as the result of having sexual/physical violence /emotional violence? (<i>More than one answer is possible</i>) 1. Poor achievement/failure from day to day activities, 2. Dropping out from school/usual work 3. Rejections from family/friends 4. Other (specify) 			
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Part III Patient Health Questionnaire (PHQ-9)

Direction: *Below is a list of common symptoms of depression. Please carefully read each item in the list and indicate how much you have been bothered by the problem for the last two weeks by circling the number in the corresponding space in the column next to each item.*

No	Items	Not at all=0	Several days =1	More than half the days=2	Nearly every day =3
1	Little interest or pleasure in doing things.	0	1	2	3
2	Feeling down or depressed or hopeless	0	1	2	3
3	Trouble failing or staying asleep or sleep too much.	0	1	2	3
4	Feeling tired or having little energy	0	1	2	3
5	Poor apatite or over eating	0	1	2	3
6	Feeling bad about yourself or that you are a failure or have let yourself or your family down.	0	1	2	3
7	Trouble concentrating on things such as reading the newspaper or watching TV.	0	1	2	3
8	Moving or speaking so slowly that other people could have noticed? Or the opposite –being so fidgety or restless that you have been moving around a lot more than usual.	0	1	2	3
9	Thought that you would better off dead or hurting yourself in some way.	0	1	2	3

State-Trait Anxiety Inventory for Adults
Self-Evaluation Questionnaire
STA Y-I Form and Form T-2

Direction: A number of Statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you feel right now, that is, at this moment. There are no rights or wrong answers. Don't spend too much time on any one statement but give the answer which seems to describe your present feeling best.

No	Items	Not at all	Some what	Moderately so	Very much so
1	I feel calm	4	3	2	1.
2	I feel secure	4	3	2	1
3	I am tense	1	2	3	4
4	I feel strained	1	2	3	4
5	I feel at ease	4	3	2	1
6	I feel upset	1	2	3	4
7	I am presently worrying over possible misfortune	1	2	3	4
8	I feel satisfied	4	3	2	1
9	I feel frightened	1	2	3	4
10	I feel comfortable	4	3	2	1
11	I feel self-confident	1	2	3	4
12	I feel nervous	1	2	3	4
13	I am jittery	1	2	3	4
14	I feel in decisive	1	2	3	4
15	I am relaxed	4	3	2	1
16	I feel content	4	3	2	1
17	I am worried	1	2	3	4
18	I feel confused	1	2	3	4
19	I feel steady	4	3	2	1
20	I feel pleasant	4	3	2	1

Direction: A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you generally feel. There is no right or wrong answers. Don't spend too much time on any one statement but give the answer which seems to describe how you generally feel.

No	Items	Almost never	Some times	Often	Almost Always
21	I feel pleasant	4	3	2	1
22	I feel nervous and restless	1	2	3	4
23	I feel satisfied with myself	4	3	2	1
24	I wish I could be as happy as others seem to be.	1	2	3	4
25	I feel like a failure	1	2	3	4
26	I feel rested	4	3	2	1
27	I am "calm" cool and collected.	4	3	2	1
28	I feel that difficulties are piling up so that I can't overcome them.	1	2	3	4
29	I worry too much over something that really doesn't matter.	1	2	3	4
30	I am happy.	4	3	2	1
31	I have disturbing thoughts.	1	2	3	4
32	I lack self-confidence.	1	2	3	4
33	I feel secure	4	3	2	1
34	I make decisions easily.	4	3	2	1
35	I feel inadequate	1	3	2	1
36	I am content.	4	3	2	1
37	Some unimportant thought runs through my mind and bothers me.	1	2	3	4
38	I take disappointments so keenly that I can't put them out of my mind.	1	2	3	4
39	I am a steady person.	4	3	2	1
40	I get in a state of tension or turmoil as I think every my recent concerns and interests.	1	2	3	4

Part V: PTSD Check List – Civilian Version (PCL-C)

Instructions: Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each statement and then circle the appropriate number to the right of the statement to indicate how much you have been bothered by that problem in the past month.

No	Items	Not at all(1)	A little bit (2)	Moderately (3)	Quite a bit(4)	Extremely (5)
1	Repeated, disturbing memories, thoughts, or images of a stressful experience from the past?	1	2	3	4	5
2	Repeated disturbing dreams of a stressful experience from the past?	1	2	3	4	5
3	Suddenly acting or feeling as if a stressful experience were happening again (as if you were reliving it)?	1	2	3	4	5
4	Feeling very upset when something reminded you of a stressful experience from the past?	1	2	3	4	5
5	Having physical reaction (E.g. Heart pounding trouble breathing or sweating) when something reminded you of a stressful experience from the past?	1	2	3	4	5
6	Avoid thinking about or talking about a stressful experience from the past or avoid having feelings repeated to it?	1	2	3	4	5
7	Avoid activities or situations because they remind you of a stressful experience from the past?	1	2	3	4	5
8	Trouble remembering important parts of a stressful experience from the past?	1	2	3	4	5
9	Loss of interest in things that you used to enjoy?	1	2	3	4	5
10	Feelings distant or cut off from other people?	1	2	3	4	5
11	Feeling emotionally numb or being unable to have loving feelings for those close you?	1	2	3	4	5
12	Feeling as if your future will somehow be cut short?	1	2	3	4	5
13	Trouble falling or staying asleep?	1	2	3	4	5
14	Feeling irritable or having angry out bursts?	1	2	3	4	5
15	Having difficulty concentrating?	1	2	3	4	5
16	Being “Super alert” or watchful on guard?	1	2	3	4	5
17	Feeling jumpy or easily startled?	1	2	3	4	5

PART V Rosenberg's Self-Esteem Scale

Instructions: *Below is a list of statements dealing with your general feelings about yourself. Please indicate how you (strongly agree, agree, disagree and strongly disagree) with each statement circling the corresponding number in the column right of each statement.*

No	Items	Strongly Agree	Agree	Disagree	Strongly Disagree
1	I feel that I am a person of worth, at least on an equal with others.	3	2	1	0
2	I feel that I have a number of good qualities.	3	2	1	0
3	All in all, I am inclined to feel that I am a failure.	0	1	2	3
4	I am able to do things as well as most other people.	3	2	1	0
5	I feel I do not have much to be proud of.	0	1	2	3
6	I take a positive attitude toward myself.	3	2	1	0
7	On the whole, I am satisfied with myself.	3	2	1	0
8	I wish I could have more respect for myself.	0	1	2	3
9	I certainly feel useless at times.	0	1	2	3
10	At times I think I am no good at all.	0	1	2	3

Thank You Very Much for Your Cooperation!!!

Appendix B: Amharic Version of the Instrument

አዲስ አበባ ዩኒቨርሲቲ የስነ-ትምህርት እና ስነ-ባህሪ ኮሌጅ የልዩ ፍላጎት ትምህርት ክፍል

ውድ የጥናቱ ተሳታፊዎች፣

በአዲስ አበባ ዩኒቨርሲቲ የስነ-ትምህርት እና ስነ-ባህሪ ኮሌጅ የልዩ ፍላጎት ትምህርት ክፍል ተማሪ ስሆን ፤ ለሶስትኛ ዲግሪ ማህያዎ የሚሆን ጥናት “ፆታዊ ጥቃቶች ከስነልቦና ጤና ጋር ያላቸው ተዛምዶ” በሚል ርዕስ በመስራት ላይ አገኛለሁ።

የዚህ መጠይቅ ዋና አላማ የአካል ጉዳትኛ የሆኑና ያልሆኑ ሴቶች የሚደርስባቸውን አካላዊ ፣ ስነልቦናዊ እና ጾታዊ ጥቃት ከስነልቦና ጤና ጋር ስላላቸው ግንኙነት መረጃ ማሰባስብ ነው።

በመጠይቁ ውስጥ የተካተቱት አንዳንድ ጥያቄዎችግላዊሊሆንብዎትይችላል።ነገርግንጥናቱን የተሃላ ለማድረግ በጣም ጠቃሚ ስለሆኑና ማንኛውም መረጃ ሚስጥራዊ በሆነና ለጥናቱ አላማ ብቻ የሚውል መሆኑን ላረጋግጥልዎት እወዳለሁ።

ለጥናቱ አጠቃላይ ውጤታማነት እና መሳካት እርስዎ የሚሰጡት መረጃ ከፍተኛውን ሚና የሚይዝ በመሆኑ የተወሰነ ጊዜዎትን በመወሰድ ትክክለኛውን መረጃ በመስጠት እንዲተባብሩኝ ስል በአክብሮት እጠይቃለሁ። በዚህ መጠይቅ በማንኛውም ቦታ ላይ ስሞትን ወይም የእርስዎን ማንነት የሚገልጽ መረጃ መፃፍ አያስፈልግዎትም። መጠይቁን በተመለከተ ማንኛውንም ጥያቄ ለመጠየቅ ከፈለጉ በአካል ወይም የሚከተሉትን አድራሻዎች በመጠቀም ማቅረብ ይችላሉ።

እንሻው ተሾመ

enishaw19@gmail.com

ስልክ 0913306216

በጥናቱ ለመሳትፍ ፍቃደኛ ነዎት?

አዎ

☐

አይደለሁም

☐

ወደ ሚቀጥለው ገጽ ይግቡ

ስለነበረን ቆይታ አመሰግናለሁ ወደ ቀጣዩ

ገጽ መሄድ አያስፈልግዎትም።

በፍቃደኝነት ላይ የተመሰረተ የስምምነት ቅጽ

በቅድሚያ ካለዎት ውድ ጊዜ በመቀነስ እና በጥናቱ ለመሳተፍ ፍቃደኛ በመሆንዎ ከልብ ለመሰግንዎት እወዳለሁ። እባክዎ ይህን የስምምነት ውል በጥንቃቄ ያንብቡት። እርስዎ አካላዊ ፣ ሰነ-ልቦናዊ እና ወሲባዊ ጥቃቶች ከስነልቦና ጤና ጋር ያላቸውን ተዛምዶ ለማወቅ በሚደረገው ጥናት ውስጥ እንዲሳተፉ ተጋብዘዋል። የርሰዎ በዚህ ጥናት ላይ መሳተፍ በፍጹም ፍቃደኝነትዎ ላይ የተመሰረተ ነው። የእርስዎ በጥናቱ መሳተፍዎን ለማቋረጥ የሚፈልጉ ከሆነ በማንኛውም የጥናቱ ደረጃ እና ጊዜ ማቋረጥ ይችላሉ። በጥናቱ ላይ መሳተፍዎ በእርስዎ ላይ የሚያመጣው ምንም አይነት ጉዳት እንደሌለ ከወዳሁ ላረጋግጥልዎት እወዳለሁ።

ጥናቱን በተመለከተ ምንም አይነት ጥያቄ ፣ አስተያየት ወይም ሊብራራልዎት የሚፈልጉት ሀሳብ ካለዎት የጥናቱን አስተባባሪ በግልጽ ሊያነጋግሩ ይችላሉ። በተጨማሪም በጥናቱ ዙሪያ የበለጠ ማብራሪያ የሚያስፈልግዎት ከሆነ የሚከተሉትን መረጃዎች በመጠቀም በመገናኘት በጥያቄዎቹ ላይ መነጋገር እንችላለን።

እንሻው ተሾመ
ስልክ ፡ 0913306216
ኢሜል፡ enishaw19@gmail.com

በጥናቱ በመሳተፍዎ በድጋሚ አመሰግናለሁ!!!

እኔ-----ከላይ የተጠቀሰውን የውል ስምምነት አንብቤ (ተነበልኝ) በሚገባ ተረድቼ በጥናቱ ለመሳተፍ ወስኛለሁ። በዚህ ጥናት ውስጥ መሳተፍ ፍጹም በእኔ ፍቃደኝነት ላይ የተመሰረተ መሆኑን ተረድቼ የፈረምኩ ሲሆን ፤ አስፈላጊ ሆኖ ካገኘሁትም የህን ፊርማ ከፈረምኩ በኋላ ምንም አይነት ተጽእኖ ሳይደረግብኝ ከጥናቱ ተሳትፎ ማቋረጥ እንደምችል፡ ተገንዝቤ አለሁኝ።

(የተሳታፊ ፊርማ) (ቀን)

(የአስተባባሪው ፊርማ) (ቀን)

ክፍል አንድ ፡ አጠቃላይ መረጃ

መመሪያ፡በዚህክፍልየእርስዎንአጠቃላይመረጃየሚጠይቁአስራአንድጥያቄዎችቀርበዋል።እባክዎእርስዎንየሚመለከቱትንመረጃዎችቁጥር በማክበብወይምመረጃውንበተሰጠውባዶበታላይእንዲፅፉእጠየቃለሁ።

ተራ.ቁ	ጥያቄ	ምርጫ
1.	በአሁን ጊዜ እድሜዎ ስንት ነው?	1) 15-24 2) 25-34 3) 35-44 4) 45-54 5) 55 እና ከዚያ በላይ
2.	ያለዎት የጉዳት አይነት?	1) ማየት የተሳናት 2) መስማት የተሳናት 3) የአካል ጉዳት 4) ምንም አይነት ጉዳት የለኝም
3.	የምን እምነት ተከታይ ነዎት?	1) ኦርቶዶክስ 2) ሙስሊም 3) ካቶሊክ 4) ፕሮቴስታንት 5) ሌላ ከሆነ ይግለጹ-----
4.	የጋብቻዎት ሁኔታ ምን ይመስላል?	1) አላገባሁም 2) አግብቻለሁ 3) ተፋትቻለሁ 4) ተለያይቻለሁ 5) ባለበቴ በህወት የለም
5.	ካገቡከባለቤትዎ/ከጓደኛዎጋርላምንያህልጊዜ ኖረዋል?	1) ከአንድአመት በታች 2) ከ1-3 አመት 3) ከ4-6አመት 4) ከ6 አመት በላይ
6.	ምን ያህል ልጆች ወልደዋል?	1) አልወለድኩም 2) 1-3 ልጆች 3) 4-6 ልጆች 4) ከ6 ልጆች በላይ
7.	በአሁኑ ሰአት በምን ስራ ላይ ተሰማርተዋል?	1) የቤት እመቤት 2) ነጋዴ

		3) የመንገድት ሠራተኛ 4) የቀን ሰራተኛ 5) ከተጠቀሱት ሌላ ከሆነ ቢገልጹ-----
8.	የወር ገቢዎች ምን ያህል ነው?	1) ከ1000 ብር ያነሰ 2) ከ1000—2000ብር 3) ከ2001-3000 ብር 4) ከ3001-4000 ብር 5) ከ4001-5000ብር 6) ከ5001ብር በላይ
9.	የትምህርትደረጃዎች ምን ይመስላል?	1) አልተማርኩም 2) አንደኛ ደረጃ 3) ሁለተኛ ደረጃ 4) ቴክኒክ እና ሙያ ዲፕሎማ 5) ኮሌጅ ዲፕሎማ 6) ዩኒቨርሲቲ ዲግሪ 7) ማስተር ዲግሪ እና ከዚያ በላይ
10.	ባለቤትዎ/የወንድዎደኛዎየአልኮልመጠጥ ይጠጣሉ?	1) አዎ ይጠጣሉ 2.አይጠጡም
11.	ባለቤትዎ/የወንድዎደኛዎጫትይቅማሉ?	1) አዎ ይቅማሉ 2. አይቅሙም

ክፍልሁለት :በትዳርጓደኛ/ በወንድጓደኛ /በማንኛውምሌላሰው:የሚደርስጥቃትንበተመለከተ

መመሪያ: በመቀጠል በብዙ ሴቶች ላይ የተለመዱ የአካል፣ የሰነ-ልቦና እና የወሲብ ጥቃት ምልክቶች ተዘርዝረዋል። እባክዎ ላለፉትአሰራራ ሁለት ወራት እና ከአስራ ሁለት ወራት በፊት (በህይወት ዘመንዎ) የተጠቀሱት ጥቃቶች በተዳር ጓደኛዎ ወይም በሌላ ሰው አጋጥሞዎች ከሆነ (✓) ምልክት በተሰጠው ክፍት ቦታ ላይ በማድረግ ወይም አሰፍላጊውን መረጃ በመሙላት ምላሽ እንዲሰጡኝ እጠይቃለሁ። •

• • • • + .ቁ	የጥቃት አይነቶች	አላጋጠመኝም	በለፉት 12 ወራትውስጥ አጋጥሞኛል	ከ12 ወራት በፊት አጋጥሞኛል
I	አካላዊ ጥቃት: የትዳርጓደኛዎ/ከዚህበፊትየነበረዎትማንኛውምየወንድጓደኛ /በማንኛውምሌላሰው:			
1	በጥፊ መትቶዎት ወይም ቢመታ ሊጎዳ የሚችል ነገር ወርወርብዎት ያውቃል?			
2	በባክስ ወይም በሌላ የሚጎዳ ነገር መትቶዎት ወይም ደብድበዎት ያውቃል?			
3	ሆነ ብሎ አንገትዎን አንቆ ወይም አፍኖ ወይም በእሳት አቃጥሎዎት ያውቃል?			
4	በጦር መሳሪያ ፣ በቢለዋ ፣ ወይም ሌሎች መሳል ቁሳቁሶችን በመጠቀም ማስፈራሪያ አጋጥሞዎት ያውቃል?			
II	ወሲባዊ ጥቃት: የትዳርጓደኛዎ/ከዚህበፊትየነበረዎትማንኛውምየወንድጓደኛ /ማንኛውምሌላሰው:			
5	እርስዎ ሳይፈልጉ ጉለበትን በመጠቀም የግበረ ስጋ ግንኙነት እንዲፈጽሙ ተገደው የውቃሉን?			
6	የማይፈልጉት አይነት የግብረ ስጋ ግንኙነት እንዲፈጽሙ አስገድዶት ያውቃሉን?			
7	ከፍላጎትዎውጭ ሰውነት የመነካካት ወይም የማሻሻት ሁኔታ ገጥሞት ያውቃል?			
III 8	ስነልቦናዊ ጥቃት: በትዳርጓደኛዎ/በወንድጓደኛዎ/ማንኛውም ሌላ ሰው: የሚከተሉት ደርሶብዎት ያውቃሉ?(ከአንድ በላይ መምረጥ ይችላሉ). 1) በሌሎች ፊት ክብር እንዳይኖርዎት ተዋርደዋል? 2) ማስፈራራት ደርሶብዎት ያውቃል? 3) የማይፈልጉን ነገር እንዲፈጽም ልገደድ እችላለሁ ብለው ይፈራሉ? 4) ውሳኔ መሰጠት አለመቻል አጋጥሞት ያውቃል? 5) ተሰድበው ያውቃሉ? 6) ከጓደኛ/ከቤተሰብአባላትእራስንማግለልአጋጥሞት ያውቃል? 7) ሌላ ካለ እባክዎን ይገለጹ..... • • •			
9	በደረሰብዎት የአካል፣የሰነ-ልቦና እና የወሲብ ጥቃት የሚከተሉት ተከስቶብዎታል? (ከአንድ በላይ መምረጥ ይችላሉ). 1. እራስን የመውቀስ ስሜት 2. የፍርሀት ስሜት 3. የተስፋ ማጣት 4. ራስን የማጥፋት ሀሳብ 5. ራስን የማጥፋት ሙክራ 6. ለሱስ ጥገኛ መሆን 7. ተጨማሪ ካለዎት ቢገልጹልኝ.....			
10	በደረሰብዎት የአካል፣የሰነ-ልቦና እና የወሲብ ጥቃት ከሚከተሉት የትኛው ሁኔታ አጋጥሞዎታል? (ከአንድ በላይ መምረጥ ይችላሉ). 1) በተለመዱ ስራዎች ውጤታማ አለመሆን 2) ከትምህርትም ሆነ ከተለመዱ ስራዎች ማቻረጥ			

	3) ከቤተሰብም ሆነ ከሽያጭ መገለል			
	4) ተጨማሪ ካለዎት ቢገልጹልኝ.....			

ክፍል ሦስት፡ የድብርት መለኪያ (PHQ-9)

መመሪያ፡ ከዚህ በታች ዘጠኝ ጥሩ ሰሜት አለመሰማት ምልክቶች ተዘርዝረዋል። እባክዎን እያንዳንዱን ጥያቄ ከአነበቡ በኋላ የተጠቀሱት ምልክቶች ላላፉት ሁለት ሳምንታት ውስጥ እንዳጋጠምዎት በምርጫዎቹ ስር የተገለጹትን ቁጥሮች በማክበብ ይምረጡ።

ተ.ቁ	ጥያቄዎች	በፍጹም የለም	ከሰባት ቀናት ላነሰ ጊዜ አጋጥሞኛል	ከሰባት ቀናት በላይ አጋጥሞኛል	ከሞላ ጎደል በየቀኑ ያጋጥመኛል
1	ነገሮችን ሲሰሩ ፈላጎት የማጣት ወይም የሚያግኙት ደስታ በጣም ትንሽ ነበር?	0	1	2	3
2	የትካዜ፣ የበታችነት፣ የጭንቀት፣ የድብርት ወይም ተስፋ የመቁረጥ ስሜት ነበረብዎት?	0	1	2	3
3	ያልተስተካከለ እንቅልፍ፣ የእንቅልፍ የማጣት ወይም ከመጠን በላይ የመተኛት ችግር ነበረብዎት?	0	1	2	3
4	ድካም የመሰማት ወይም አቅም የማይስራ ሁኔታ ነበረብዎት?	0	1	2	3
5	የምግብ ፍላጎት መቀነስ ወይም በጣም ብዙ የመብላት ችግር ነበረብዎት?	0	1	2	3
6	ስለራስዎ መጥፎ ስሜት ተሰምቶዎት ወይም አልተሳካልኝም ብለው አስበው ወይም ቤተሰቤን አሳፈርኩ ብለው አስበው ነበር?	0	1	2	3
7	ነገሮች ላይ ሀሳብዎ ትንሙሰበት ወይም የማስታወሻ ችግር ነበረብዎት ለምሳሌ ገዜ ጣሲያነው ወይም ቲሺሲ መለክቱ?	0	1	2	3
8	ከተለመደው ውጭ እረፍት ማጣት ፣ ወዲህ ወዲያ የማለት ወይም ሌሎች ሰዎች በተቃራኒው ሊገነዘቡት በሚችሉት ሁኔታ ቀስ ብሎ የመናገር ወይም የመንቀሳቀስ ችግር ነበረብዎት?	0	1	2	3
9	ብዎት ይሻላል ወይም እራሴን በሆነ መንገድ ብጎዳ ይሻላል ብለው ያሰቡበት ጊዜ ነበር?	0	1	2	3

ክፍል አራት- ለራስ ያለ ግምትን (Self-Esteem) መለኪያ መጠይቅ

መመሪያ፡ ከዚህ በታች ለራስ ያለ ግምትን ለመለካት የሚያገለግሉ ጥያቄዎች ቀርበዋል። እባክዎን ለጥያቄዎቹ (በጣም እስማማለሁ፣ እስማማለሁ፣ አልስማማም፣ በጣም አልስማማም) የሚሉትን የሚዎክሉ ቁጥሮችን በማክበብ ይምረጡ።

ተ.ቁ	ጥያቄ	በጣም እስማማለሁ	እስማማለሁ	አልስማማም	በጣም አልስማማም
1	እንደሌሎች ሰዎች እኩል ጠቀሜታ እንደሆንኩ ይሰማኛል።	3	2	1	0
2	ጥሩ ጥሩ የሆኑ የስብዕና መገለጫዎች እንዳሉኝ ይሰማኛል።	3	2	1	0
3	በአጠቃላይ ይዎቴ የልተሳካልኝ ንግድ አስባለሁ።	0	1	2	3
4	እንደ አብዛኞቹ ሰዎች ሁሉ ነገሮችን በጥሩ ሁኔታ መስራት እችላለሁ፡፡	3	2	1	0
5	ስለራሴ ሳስብብዝም ሊያኩራራ የሚችል ነገር እንደሌለኝ ይሰማኛል።	0	1	2	3
6	በአጠቃላይ ጥሩ የሆነ አመለካከት እንዳለኝ መጥቀስ እችላለሁ።	3	2	1	0
7	በአጠቃላይ ስለራሴ ሳስብ እርካታ ይሰማኛል።	3	2	1	0
8	ለራሴ ክፍያ የለከብር እንዲኖረኝ እመኝ ነበር።	0	1	2	3
9	በእርግጠኝነት ጠቃሚ እንዳልሆንኩ ይሰማኛል።	0	1	2	3
10	አንዳንድ ጊዜ ባከጠቃለይ ጥሩ እንዳልሆንኩ ይሰማኛል።	0	1	2	3

ክፍልአምስት፡የጭንቀትመለኪያ (State-Trait Anxiety Inventory)

መመሪያ፡ ከዚህ በታች ሰዎች ራሳቸውን የሚገልጹባቸው የተለያዩ ባህሪያት ተዘርዝረዋል። እባክዎን የተሰጡትን ምልክቶች በጥንቃቄ ካነበቡ በኋላ ችግሮቹ በእርሶዎ ላይ በአሁኑ ሰዓት ታየታቸውን ከተሰጡት ምርጫዎች ስር ያሉትን ቁጥሮች በማክበብ ይግለጹ። ትክክለኛ ወይም ስህተት የሆነ ምላሽ የለም። በአንድ ጥያቄ ላይ ብዙ ጊዜ አያጥፉ ነገርግን በአሁኑ ጊዜ ያለዎትን ትክክለኛ ስሜት ይግለጹ።

ተ.ቁ	ጥያቄዎች	በፍጹም የለም	በመጠኑ	በአመዛኙ	በጣም ይታይብኛል
1	የስሜትመቀዝቀዝይታይብኛል።	4	3	2	1.
2	ደህንነቴየተጠበቀህልይሰማኛል።	4	3	2	1
3	እየተጨነቅሁእንደሆንኩይሰማኛል።	1	2	3	4
4	የመረበሽስሜትይሰማኛል።	1	2	3	4
5	ነገሮችሁሉቀናእንደሆኑይሰማኛል።	4	3	2	1
6	የመናደድስሜትይሰማኛል።	1	2	3	4
7	በህይወቴውስሉስሰትስለሚችልመልካምያልሆነአጋጣሚአስባለሁ።	1	2	3	4
8	የእርካታስሜትይሰማኛል።	4	3	2	1
9	የፍርሃትስሜትይሰማኛል።	1	2	3	4
10	የምቶትስሜትይሰማኛል።	4	3	2	1
11	በራስዎመተማመንስሜትይሰማኛል።	1	2	3	4
12	ራሴንመቆጣጠርያልቻልኩኝያህልይሰማኛል።	1	2	3	4
13	የፍርሃትእናየጭንቀትስሜትይሰማኛል።	1	2	3	4
14	ጠቃሚእንዳልሆንኩኝያህልይሰማኛል።	1	2	3	4
15	ዘናያለስሜትይሰማኛል።	4	3	2	1
16	የስኬትስሜትይሰማኛል።	4	3	2	1
17	ለነገሮችከመጠንበላይትኩረትመስጠትእናየመጨነቅስሜትይታይብኛል።	1	2	3	4
18	ምንማድረግእንዳለብኝለመወሰንእየተቸገርኩኝእንደሆነይሰማኛል።	1	2	3	4
19	የመረጋጋትስሜትይሰማኛል።	4	3	2	1
20	የደስተኛነትስሜትይሰማኛል።	4	3	2	1

መመሪያ፡ ከዚህ በታች ሰዎች ራሳቸውን የሚገልጹባቸው የተለያዩ ባህሪያት ተዘርዝረዋል። እባክዎን የተሰጡትን ምልክቶች በጥንቃቄ ካነበቡ በኋላ ችግሮቹ በእርሶዎ ላይ በአሁኑ ሰዓት ታየታቸውን ከተሰጡት ምርጫዎች ስር ያሉትን ቁጥሮች በማክበብ ይግለጹ። ትክክለኛ ወይም ስህተት የሆነ ምላሽ የለም። በአንድ ጥያቄ ላይ ብዙ ጊዜ አያጥፉ ነገርግን በአሁኑ ጊዜ ያለዎትን ትክክለኛ ስሜት ይግለጹ።

ተ.ቁ	ጥያቄዎች	በፍጹም ለም	አንዳንድ ጊዜ ያጋጥመኛል	በተደጋጋሚ ያጋጥመኛል	ሁል ጊዜ ያጋጥመኛል
21	የደስተኛነት ስሜት ይሰማኛል።	4	3	2	1
22	ራስን መቆጣጠር እና መረጋጋት ያለመቻል ስሜት?	1	2	3	4
23	ስለራሴ ሳስብ የእርካታ ስሜት ይሰማኛል።	4	3	2	1
24	እንደሌሎች ሰዎች ደስተኛ መሆን እመኛለሁ።	1	2	3	4
25	ያልተሳካልኝ እንደሆንኩኝ ይሰማኛል።	1	2	3	4
26	ቀልጣፋ እና ጤናማ የሆንኩኝ ያህል ይሰማኛል	4	3	2	1
27	ዝምተኛ ስሜት ቀዝቃዛና ቁጥብ እንደሆንኩኝ ይሰማኛል።	4	3	2	1
28	አስቸጋሪ የሆኑ ነገሮችን በበለጠ መጠቀሚያ እንደማልችል ይሰማኛል።	1	2	3	4
29	ለኔህ ይዎት ብዙም ጠቃሚ ላልሆነ ነገር ብዙ እጩነታለሁ።	1	2	3	4
30	ደስተኛነት ብሎ ማሰብ።	4	3	2	1
31	የሚረብሽኝ ሀሳብ እንዳለ ይሰማኛል።	1	2	3	4
32	በራስ መተማመን እንደሌለኝ ይሰማኛል።	1	2	3	4
33	በጥሩ ደህንነት ላይ እንዳለሁኝ ይሰማኛል።	4	3	2	1
34	በቀላሉ ውሳኔ ለመወሰን እችላለሁ።	4	3	2	1
35	ለነገሮች ብቁ እንዳልሆንኩ ያህል ይሰማኛል።	1	3	2	1
36	የስኬታማነት ስሜት ይሰማኛል።	4	3	2	1
37	አንዳንድ ጠቃሚ የልሆኑ ሀሳቦች በአእምሮጄ እየተመላለሱ ያስጩኝ ይሰማኛል።	1	2	3	4
38	ተስፋ አስቆራጭ ነገሮች በሚያጋጥሙኝ ጊዜ ከስተቱ ንክኦ እምሮጄ ማውጣት አለመቻል ያጋጥመኛል።	1	2	3	4
39	የተረጋጋሁኝ ብሎ ማሰብ።	4	3	2	1
40	በቅርብ ጊዜ የሚያሳስብኝ ነገሮች እና ፍላጎቶቼን በማስብ በትጊዜ ጥሩ ያልሆነ የስሜት ውጥረት እና ጭንቀት ይሰማኛል።	1	2	3	4

ክፍልስድስት፡ አንድ አስጨናቂ የሆነክስተትን ተከትሎ የሚታዩባህሪ ለውጦችን (PTSD) መለኪያ መጠይቅ መመሪያ፡ከዚህ በታች ሰዎች ከአንድ አስጨናቂ ክስተት ለምሳሌ ሴቶች በወንዶች የሚደርስባቸውን ያላካላዊ ፤ የስነ ልቦናዊ እና ወሲባዊ ጥቃቶችን ተከትሎ የሚመጡ የስሜት፣ የባህሪ ፣የስትሶሰብ እና የአካላዊ ለውጥ ምልክቶች ተዘርዝረዋል። እባክዎን እያንዳንዱን ጥያቄ ከአነበቡ በኋላ በስተቀኝ በኩል ከተሰጡት ምርጫዎች ስር ያሉትን ቁጥሮች ያክብቡ።

ተ. ቁ	ጥያቄዎች	በፍጹም የለም	በመጠኑ ይከሰትብኛል	በመካከለኛ ሁኔታ ይከሰትብኛል	በአብዛኛው ይከሰትብኛል	በከፍተኛ ደረጃ ይከሰትብኛል
1	የደረሰብዎትን ስቃይ በተደጋጋሚ ማስታወስ ፣ ስለነበረው ሁኔታ ማሰብ እና በምናብ መመልከት?	1	2	3	4	5
2	ከደረሰውጥቃት ጋር ተያይዞ የሚረብሽ ህልም በተደጋጋሚ መመልከት?	1	2	3	4	5
3	ጥቃቱአሁን እንደደረሰብዎት አድርጎ በድርጊት መግለጽ ወይም ማሰብ?	1	2	3	4	5
4	ያለፈውን ጥቃት የሆነ ነገር ሲያስታውስዎት በጣም የመናደድ ስሜት?	1	2	3	4	5
5	ያለፈውን ጥቃት የሆነ ነገር ሲያስታውስዎት የልብ ምት መጨመር ፣ ቶሎ ቶሎ መተንፈስ እና ላብ ማላብ?	1	2	3	4	5
6	ያለፈውን የጥቃት ሁኔታ ማስብም ሆነ ስለክስትቱ ለማውራት አለመፈለግ ወይም ክስተቱን ከሚያስታውስ ስሜት መራቅ ?	1	2	3	4	5
7	ያለፈውን አስከፊ የጥቃት ሁኔታ ከሚያስታውሱ ድርጊቶችም ሆነ ሁኔታዎች ራስዎን የማራቅ አዘማሚያ?	1	2	3	4	5
8	ያለፈውን አስከፊ ክስተት ሲያስታውሱ መጥፎ ስሜት መሰማት?	1	2	3	4	5
9	ከአሁን በፊት ለሚያዝናኑዎት ነገሮች የፍላጎት መቀነስ?	1	2	3	4	5
10	ከሌሎች በስሜት መራቅ ወይም ከሌሎች ጋር ግንኙኝነት ለማድረግ አለመፈለግ ?	1	2	3	4	5
11	የስሜት መቀዝቀዝ ወይም በቅርብ ላሉ ሰዎች ፍቅር መስጠት አለመቻል?	1	2	3	4	5
12	የህይወት ዘመኔ አጭር ሊሆን ይችላል የሚል ስሜት መሰማት?	1	2	3	4	5
13	በቂ የሆነ እንቅልፍ አለማግኘት ወይም ለረጅም ጊዜ መተኛት?	1	2	3	4	5
14	የመንጫንጭ ስሜት ወይም ድንገተኛ የሆነ ቁጣ እና ንዴት?	1	2	3	4	5
15	ሀሳብዎትን መሰብሰብ አለመቻል?	1	2	3	4	5
16	ከፍተኛ የሆነ የተጠራጠሪነት ስሜት እና አዩኝ አላዩኝ የሚል ባህሪ?	1	2	3	4	5
17	ራስን የመሳት ወይም መቆጣጠር አለመቻል ወይም የመንቀጥቀጥ ስሜት?	1	2	3	4	5

ለጥናቱ መሳካት ላደረጉልኝ ከፍተኛ ትብብር በጣም አመሰግናለሁ !!!

Appendix C: Pilot test result of the instruments

1. Piolet test result of PHQ-9

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.901	.902	9

Inter-Item Correlation Matrix									
	VAR00001	VAR00002	VAR00003	VAR00004	VAR00005	VAR00006	VAR00007	VAR00008	VAR00009
VAR00001	1.000	.556	.420	.526	.465	.644	.602	.417	.448
VAR00002	.556	1.000	.297	.516	.557	.513	.550	.492	.480
VAR00003	.420	.297	1.000	.440	.319	.532	.483	.386	.238
VAR00004	.526	.516	.440	1.000	.681	.470	.583	.643	.572
VAR00005	.465	.557	.319	.681	1.000	.521	.570	.521	.496
VAR00006	.644	.513	.532	.470	.521	1.000	.635	.476	.707
VAR00007	.602	.550	.483	.583	.570	.635	1.000	.465	.552
VAR00008	.417	.492	.386	.643	.521	.476	.465	1.000	.423
VAR00009	.448	.480	.238	.572	.496	.707	.552	.423	1.000

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
VAR00001	13.8250	42.661	.678	.552	.890
VAR00002	13.7500	43.628	.655	.474	.892
VAR00003	13.9750	45.410	.503	.452	.903
VAR00004	13.6000	42.195	.740	.698	.885
VAR00005	13.8750	43.138	.685	.565	.889
VAR00006	13.8750	41.702	.760	.750	.883
VAR00007	13.9750	42.948	.747	.571	.885
VAR00008	13.9250	44.943	.630	.478	.894
VAR00009	14.0000	42.769	.649	.655	.892

1. Pilot test result of STAI-S anxiety

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.834	.832	20

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
I feel calm	45.8500	84.233	.159	.630	.837
I feel secure	46.1500	80.541	.378	.724	.828
I am tense	46.5000	78.513	.441	.588	.825
I feel strained	46.4500	75.792	.650	.817	.815
I feel at ease	45.9750	79.615	.380	.625	.828
I feel upset	45.9500	80.562	.352	.576	.829
I am presently worrying over possible misfortune	46.4500	77.741	.478	.776	.823
I feel satisfied	45.9250	81.148	.308	.660	.831
I feel satisfied	46.5000	79.179	.480	.782	.823
I feel frightened	45.5250	79.897	.457	.753	.824
I feel comfortable	46.1000	87.221	-.036	.534	.846
I feel self-confident	46.9500	77.638	.551	.653	.820
I feel nervous	46.6000	79.477	.449	.747	.824
I am jittery	46.7250	78.615	.395	.442	.827
I feel in decisive	46.1500	76.541	.618	.766	.816
I am relaxed	46.2250	77.615	.482	.745	.822
I feel content	46.2000	84.062	.209	.798	.834
I am worried	46.5000	80.667	.340	.491	.829
I feel confused	46.3000	75.190	.666	.840	.813
I feel steady	46.2750	78.922	.408	.579	.826

2. Pilot test result of STAI-T anxiety

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.816	.821	20

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
I feel pleasant	44.7500	56.551	.576	.584	.798
I feel nervous and restless	45.3500	57.413	.567	.837	.799
I feel satisfied with myself	44.7500	58.910	.419	.682	.806
I wish I could be as happy as others seem to be.	44.3000	65.395	-.127	.470	.835
I feel like a failure	45.4750	55.692	.642	.898	.794
I feel rested	44.9500	54.613	.582	.842	.795
I am "calm" cool and collected.	44.8750	64.471	-.069	.689	.834
I feel that difficulties are piling up so that I can't overcome them.	45.3250	57.148	.482	.767	.802
I worry too much over something that really doesn't matter.	45.3250	63.917	-.015	.819	.827
I am happy.	45.0500	56.869	.512	.765	.801
I have disturbing thoughts.	45.0750	57.148	.595	.889	.798
I lack self-confidence.	45.7500	57.679	.459	.678	.804
I feel secure	45.1000	59.528	.280	.558	.814
I make decisions easily.	44.9500	62.408	.108	.583	.821
I feel inadequate	45.4750	58.563	.421	.670	.806
I am content.	45.0250	54.281	.672	.854	.791
Some unimportant thought runs through my mind and bothers me.	45.0000	58.615	.478	.689	.804
I take disappointments so keenly that I can't put them out of my mind.	45.0500	59.792	.348	.769	.809
I am a steady person.	45.0500	56.664	.455	.673	.804
I get in a state of tension or turmoil as I think every my recent concerns and interests.	44.9250	57.251	.498	.692	.802

3. Pilot test result for PTSD scale

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.872	.873	17

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Repeated, disturbing memories, thoughts, or images	41.9250	155.661	.584	.786	.861
Repeated disturbing dreams	42.4750	160.204	.531	.657	.864
Suddenly acting or feeling as if a stressful experience were happening again	42.3500	156.592	.639	.828	.860
Feeling very upset when something reminded you of a stressful experience	41.1500	152.285	.661	.767	.858
Having physical reaction	42.2000	162.164	.386	.571	.870
Avoid thinking about or talking about a stressful experience	41.2750	160.256	.452	.489	.867
Avoid activities or situations because they remind you of a stressful experience	40.9000	157.887	.496	.696	.865
Trouble remembering important parts of a stressful experience	41.3250	154.635	.581	.721	.862
Loss of interest in things that you used to enjoy?	42.0750	158.174	.518	.535	.864
Feelings distant or cut off from other people	41.6250	155.728	.512	.622	.865
Feeling emotionally numb or being unable to have loving feelings for those close you?	42.3250	156.174	.638	.638	.860
Feeling as if your future will somehow be cut short?	42.4250	160.712	.470	.589	.866
Trouble falling or staying asleep?	41.8250	164.199	.333	.588	.872
Feeling irritable or having angry out bursts?	41.4500	162.100	.473	.504	.866
Having difficulty concentrating?	41.7250	163.128	.521	.678	.865
Being "Super alert" or watchful on guard?	42.1500	162.592	.384	.465	.870
Feeling jumpy or easily startled?	42.8000	167.959	.333	.550	.871

4. Pilot test result of Rosenberg self -esteem scale

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.847	.844	10

Inter-Item Correlation Matrix										
	VAR00001	VAR00002	VAR00003	VAR00004	VAR00005	VAR00006	VAR00007	VAR00008	VAR00009	VAR00010
VAR00001	1.000	.511	.440	.485	.501	.341	.534	.203	.345	.084
VAR00002	.511	1.000	.410	.473	.331	.479	.412	.567	.437	.087
VAR00003	.440	.410	1.000	.408	.328	.218	.198	.235	.327	-.080
VAR00004	.485	.473	.408	1.000	.478	.511	.499	.521	.304	.389
VAR00005	.501	.331	.328	.478	1.000	.272	.541	.230	.088	.234
VAR00006	.341	.479	.218	.511	.272	1.000	.522	.416	.485	.194
VAR00007	.534	.412	.198	.499	.541	.522	1.000	.254	.378	.250
VAR00008	.203	.567	.235	.521	.230	.416	.254	1.000	.421	.371
VAR00009	.345	.437	.327	.304	.088	.485	.378	.421	1.000	.208
VAR00010	.084	.087	-.080	.389	.234	.194	.250	.371	.208	1.000

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
VAR00001	18.4878	16.456	.601	.512	.829
VAR00002	18.6098	15.594	.646	.545	.824
VAR00003	18.9024	16.940	.420	.389	.845
VAR00004	18.5854	15.199	.713	.582	.817
VAR00005	19.0488	16.398	.513	.459	.836
VAR00006	18.6585	15.980	.593	.464	.829
VAR00007	18.8293	15.795	.618	.537	.826
VAR00008	19.0244	16.274	.548	.521	.833
VAR00009	18.5366	16.955	.508	.437	.837
VAR00010	19.0000	18.150	.287	.326	.853

Appendix D: Minimum and maximum scores and valid and missing values of the data used

Minimum and Maximum Scores, and Valid and Missing Values of PHQ-9 Data Used for Uni-variate and Multivariate (n = 473)

	N		Minimum	Maximum
	Valid	Missing		
Item1	473	0	0	3
Item2	473	0	0	3
Item3	473	0	0	3
Item4	473	0	0	3
Item5	473	0	0	3
Item6	473	0	0	3
Item7	473	0	0	3
Item8	473	0	0	3
Item9	473	0	0	3

Minimum and Maximum Scores, and Valid and Missing Values of STAI-S & STAI-T Data Used for Uni-variate and multivariate Analysis (n = 473)

	N		Minimum	Maximum
	Valid	Missing		
Item1	473	0	1	4
Item2	473	0	1	4
Item3	473	0	1	4
Item4	473	0	1	4
Item5	473	0	1	4
Item6	473	0	1	4
Item7	473	0	1	4
Item8	473	0	1	4
Item9	473	0	1	4
Item10	473	0	1	4
Item11	473	0	1	4
Item12	473	0	1	4
Item13	473	0	1	4
Item14	473	0	1	4
Item15	473	0	1	4
Item16	473	0	1	4
Item17	473	0	1	4
Item18	473	0	1	4
Item19	473	0	1	4
Item20	473	0	1	4

	N		Minimum	Maximum
	Valid	Missing		
Item1	473	0	1	4
Item2	473	0	1	4
Item3	473	0	1	4
Item4	473	0	1	4
Item5	473	0	1	4
Item6	473	0	1	4
Item7	473	0	1	4
Item8	473	0	1	4
Item9	473	0	1	4
Item10	473	0	1	4
Item11	473	0	1	4
Item12	473	0	1	4
Item13	473	0	1	4
Item14	473	0	1	4
Item15	473	0	1	4
Item16	473	0	1	4
Item17	473	0	1	4
Item18	473	0	1	4
Item19	473	0	1	4
Item20	473	0	1	4

Minimum and Maximum Scores, and Valid and Missing Values of self-esteem Data Used for Uni-variate and multivariate Analysis (n = 473)

Descriptive Statistics				
	N		Minimum	Maximum
	Valid	Missing		
Item1	473	0	.00	3.00
Item2	473	0	.00	3.00
Item3	473	0	.00	3.00
Item4	473	0	.00	3.00
Item5	473	0	.00	3.00
Item6	473	0	.00	3.00
Item7	473	0	.00	3.00
Item8	473	0	.00	3.00
Item9	473	0	.00	3.00
Item10	473	0	.00	3.00

Minimum and Maximum Scores, and Valid and Missing Values of PTSD Data Used for Uni-variate and multivariate Analysis (n = 473)

Descriptive Statistics				
	N		Minimum	Maximum
	Valid	Missed		
Item1	473	0	1.00	5.00
Item2	473	0	1.00	5.00
Item3	473	0	1.00	5.00
Item4	473	0	1.00	34.00
Item5	473	0	1.00	5.00
Item6	473	0	1.00	5.00
Item7	473	0	1.00	5.00
Item8	473	0	1.00	5.00
Item9	473	0	1.00	5.00
Item10	473	0	1.00	5.00
Item11	473	0	1.00	5.00
Item12	473	0	1.00	5.00
Item13	473	0	1.00	5.00
Item14	473	0	1.00	5.00
Item15	473	0	1.00	5.00
Item16	473	0	1.00	5.00
Item17	473	0	1.00	5.00

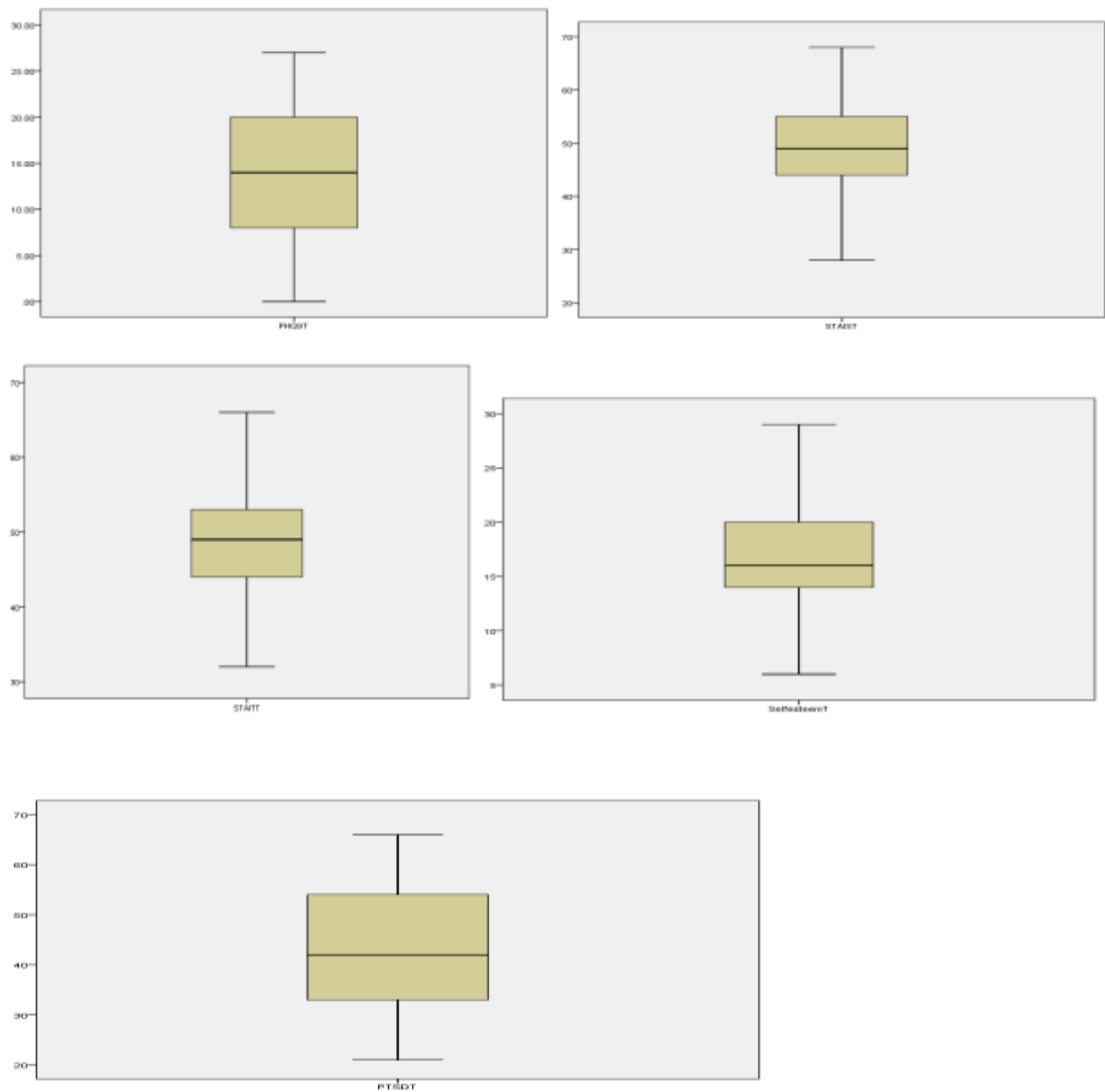
Appendix E Normality Statistics (Mahalanobis Distance)

Residuals Statistics ^a					
	Minimum	Maximum	Mean	Standard Deviation	N
Predicted Value	1.3985	1.9189	1.6623	.09402	385
Std. Predicted Value	-2.806	2.729	.000	1.000	385
Standard Error of Predicted Value	.028	.103	.057	.014	385
Adjusted Predicted Value	1.3833	1.9662	1.6626	.09461	385
Residual	-.91891	.60145	.00000	.46410	385
Std. Residual	-1.967	1.287	.000	.993	385
Stud. Residual	-2.017	1.304	.000	1.002	385
Deleted Residual	-.96621	.61671	-.00027	.47168	385
Stud. Deleted Residual	-2.025	1.305	-.001	1.002	385
<i>Mahal. Distance</i>	.422	17.800	4.987	3.084	385
Cook's Distance	.000	.035	.003	.003	385
Centered Leverage Value	.001	.046	.013	.008	385
a. Dependent Variable: Women with and without disabilities who experienced GBV					

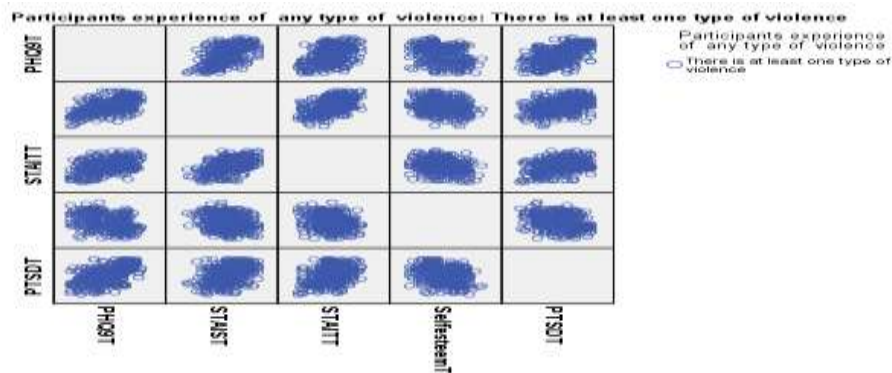
Critical Values for evaluating Mahalanobis Distance

Number of Dependent variable	Critical value
2	13.82
3	16.27
4	18.47
5	20.52
6	22.46
7	24.32
8	26.13
9	27.88
10	29.59

Appendix F: Outliers



Appendix G Linearity of the dependent variables



Appendix H

Inter-correlation among the Dependent Variables

Variables	1	2	3	4	5
1 Depression	-	.552**	.384**	.594**	-.391**
2 State anxiety		-	.528**	.403**	-.199**
3 Trait anxiety			-	.415**	-.191**
4 PTSD				-	-.327**
5 Self-esteem					-

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix I: *Box's test of equality of covariance matrices*

Box's Test of Equality of Covariance Matrices^a	
Box's M	24.918
F	1.642
df1	15
df2	878205.813
Sig.	.065